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ABSTRACT

Career education is a developmental process through which students discover their interests and talents, explore career opportunities, establish realistic and defensible career objectives, and develop a degree of employability. This publication reports the efforts utilized by the Beaverton School District, Oregon, in developing a master plan for career education encompassing these goals. In addition to a review of development activities, the publication also contains guidelines for developing and maintaining programs at the elementary, intermediate, and high school levels and a three-phase evaluation model. The guidelines consist of a series of tasks grouped into the areas of: (1) curriculum, (2) evaluation, (3) facilities, (4) guidance, (5) inservice, (6) personnel, (7) policy, (8) public relations, (9) resources and materials, and (10) transportation. (SB)

ED 066562

A MASTER PLAN FOR *Career Education*

Beaverton Schools

VT016244

ED 066562

MASTER PLAN FOR CAREER EDUCATION

Beaverton School District No. 48
Beaverton, Oregon

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EDUCATION & WELFARE
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February, 1972

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INTRODUCTION

More than ever before schools are called upon to provide educational programs which meet the needs of all students. No longer is it possible to deal with the needs of only the college-bound student. Society asks that each youth be prepared for a productive life as citizen, worker, and family member. Career education, when conceived and developed in its broadest sense, will provide a strong base for the schools to fulfill the role society is asking them to perform.

The purpose of this Master Plan is to emphasize the need, establish support, and give direction to the development and implementation of career education in the Beaverton Schools. It is a beginning point. Many hours of work by creative and concerned staff members and lay citizens will be required for full development and adequate implementation.

Appreciation is extended to all of those individuals who have expressed an interest in career education and who have contributed to the development of this plan. Special recognition is given to Ken Box, Rich Morgan, Jim Schulz, June Duvall, and members of the Task Force, all of whom were directly responsible for writing and preparing this document.

George E. Russell
Assistant Superintendent, Instruction

WHAT IS CAREER EDUCATION

Career education is a developmental process which is designed to help all individuals prepare for their life roles: vocational, economic, community, home, and avocational. Career education enables students to examine their abilities, interests, and aptitudes; relate them to career opportunities; and make valid decisions regarding further education and/or work.

Career education becomes a part of all levels of education from kindergarten through adult life. The elementary school years will provide an awareness of the world of work and an understanding of the value of work to the individual and family. Through the junior high years, the student will explore and try out his talents and interests and make tentative occupational and educational choices. The high school years will provide an opportunity for the student to prepare for entry into a broad occupational area and/or advanced educational programs after high school. Post-secondary programs will provide for specialized training, upgrading of skills, and retraining opportunities.

Career education is not a separate course in the school curriculum, nor is it an isolated activity. It is a current, ongoing, activity-oriented process incorporated throughout the curriculum, and designed to help the individual develop the skills and knowledge for effective participation in all his life roles.

DEFINITION OF TERMS

Articulation - The manner in which the classroom instruction, curricular activities, and instructional services of the school system are interrelated and interdependent. The aim of articulation is to facilitate the continuous and efficient educational program of the pupils (e.g., from one grade to the next; from elementary to secondary school; and from secondary school to college), to interrelate various areas of the curriculum (e.g., fine arts and language arts), and/or to interrelate the school's instructional program with the program of out-of-school educational institutions (e.g., the home, church, youth groups, and welfare agencies).

Career - The course or progress of one's life, especially as it relates to one's lifework.

Career Awareness - Learning activities which lead to an awareness of self and the work people do. It is generally considered to be the grades 1 - 6 phase of career education.

Career Exploration - Learning activities designed to help students understand their aptitudes, abilities, and interests and relate them to occupational opportunities. The exploration phase of career education is generally to be grades 7 - 10.

Cluster - The "cluster" is a group of occupations or family of occupational fields that are related because they include similar skills and knowledge requirements.

Cluster Curriculum - The cluster curriculum is a sequence of high school experiences centered upon the knowledge and skills common to the occupations which comprise a cluster or family.

Counseling - The process in which an experienced and qualified person assists a second person to understand himself and his opportunities, to make appropriate adjustments and decisions in the light of this insight, to accept personal responsibility for his choices, and to follow courses of action in harmony with his choices.

Defensible Career Objectives - Career objectives which are based upon an understanding of one's own aptitudes, abilities, interests, and opportunities.

Employability - Possession of skills, concepts, attitudes, and habits necessary to obtain a job.

Guidance - A process of helping individuals to help themselves through their own efforts, to discover and to develop their potential resources for personal fulfillment and social usefulness. Guidance, in a school sense, is also a program of services, coordinated in such a way as to provide the most effective help for students in this direction.

Interdisciplinary - Those activities or learning experiences jointly planned by teachers of two or more subjects that help students "tie things together." For example: the food service instructor might work with the English and math teachers to plan learning activities tied to the career program in food service. The mathematics would be oriented to the math a food service worker normally needs. At the same time, the English class work is related to the world of the food service worker. Thus, the school activities for the student are tied together around his career objective.

Job - A term used to identify the specific work a person performs.

Occupation - Refers to a group of similar work activities found in more than one place of employment; e.g., by occupation, a man is a plumber and performs many jobs.

Vocation - Synonymous with occupation.

Vocational Education - That portion of the career development program that prepares the individual for entrance into employment, upgrading of skills and knowledge, or retraining to enter a new job.

PROBLEM STATEMENT

PROBLEMS RELATED TO REALIZATION OF CAREER EDUCATION GOALS IN BEAVERTON

I. INTRODUCTION

As career education becomes fully developed, it has the potential of becoming a part of the educational program of all students. To bring about this development and provide equal and appropriate opportunities in career development for all students, several distinct problems must be considered. Many of the problems are common to the school district as a whole, while other problems are most appropriately identified with a particular level--elementary, intermediate, or high school. The problems as seen are related to certain assumptions:

1. Generally, the schools have done an inadequate job of providing the students in this community with career development opportunities.

2. Career development opportunities are appropriate for all students.

3. Career development education should begin in the early grades and continue into adult life.

II. DISTRICT

The problems existing throughout the district are related to attitudes, concepts of career education, curriculum design, guidance and counseling, and communication. These problem areas have been identified in numerous studies conducted in the district. *

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* Lynn Emerson, Some Suggestions Concerning the Development of Occupational Education (June, 1968), pp. 7-14. (Appendix A)

* Allen Lee, The Planning and Development Study for Career Education in Fourteen Beaverton Schools (October, 1971). (Appendix B)

* The Committee for Study of Programs for Non-College Bound Students, Final Report and Recommendations (January, 1966). (Appendix C)

The overriding problem in the district is an attitude which regards college entrance as a primary goal. The National Advisory Council called attention to this situation when they stated:

> At the very heart of our problem is a national attitude that says vocational education is designed for somebody else's children. This attitude is shared by businessmen, labor leaders, administrators, teachers, parents, students. We are all guilty. We have promoted the idea that the only good education is an education capped by four years of college. This idea, transmitted by our values, our aspirations and our silent support, is snobbish, undemocratic, and a revelation of why schools fail so many students. *

This attitude is reflected locally in a third-grade teacher's statement, "... when my class goes to college." It is reflected in the large number of school programs that are primarily oriented to the college bound. It is reflected when a teacher comments about a visit to a local business, "...valuable because it fortified my belief that the business community has no place within the high school."

It is reflected in a local newspaper's regular column "college scene" with no comparable coverage of what other high school graduates do. It is reflected in a local school committee's recent concern to, "...investigate the possibility of evaluating the academic preparedness of (their high school) graduates for study at institutions of higher learning. Are we doing an adequate job in preparing students for the academic challenge of colleges and universities?" No comparable concern was expressed for those who do not wish or need this kind of post high school endeavor.

A majority of the staff and community have an inadequate concept and comprehension of career education. Staff members must develop an understanding of the concept and the potential for career education before appropriate programs can be established. Community members, too, must become informed about career education and the potential it holds for their children.

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*First Annual Report, July 15, 1969. National Advisory Council on Vocational Education appointed by the President.

A communication gap exists between staff members in individual buildings and throughout the district. Staff members are often unaware of the happenings within their building and within the district which might complement their teaching. There is also much evidence that there is an absence of communication between the school staff and the community. This lack of communication leads to inadequate knowledge by educators regarding opportunities for learning which exist in the community and lack of understanding by the community of the reasons for programs and procedures of the school.

There is inadequate community involvement in the efforts to improve educational opportunities for students. Representatives from business, industry, and the community at large should participate in curriculum improvement; more resource people should be brought into the classroom; and, a greater effort should be made to take education out of the traditional classroom and into the community.

The present curriculum throughout the district, particularly in such courses as language arts, math, and science, generally does not incorporate career education concepts. Realistic world of work examples are needed at all levels as part of the instruction. Specific programs designed to develop employability skills are not adequate in variety. Articulation of programs must be strengthened.

Students should develop defensible career goals and plan their educational program in terms of these goals. Effective guidance at all levels should assist students in making these decisions. The role of guidance personnel and teachers in these activities must be defined, and a system designed to assure implementation.

III. ELEMENTARY

At the elementary grade level students should be involved in career awareness activities. At the present time there is no organized program in the district whereby all students are assured of this involvement. The problems are:

1. To identify career awareness activities appropriate for each grade level.

2. To help teachers use the career awareness activities as a natural part of their ongoing studies.

3. To make appropriate resource material available to elementary teachers and students.

IV. INTERMEDIATE

The intermediate years should offer exploratory opportunities for all students. The problems are:

1. The intermediate schools have not uniformly provided opportunities for students to participate in career exploration activities nor in study sequences designed to help them understand their attitudes, interests, and abilities.

2. There is no formal program designed to relate the activities of the classes to career opportunities.

3. Students receive limited information about the high school opportunities which will enable them to prepare for tentative and general career goals.

4. Transportation allowing student movement out into the community is limited.

V. HIGH SCHOOL

The high school years should offer continued opportunity for students to explore. In addition, students should be able to concentrate their study in a cluster of occupations. Problems limiting the development of career education in the high school are:

1. The staff lacks understanding and commitment to the cluster concept.

2. Transportation for students involved in cluster programs is critically limited.

3. Facilities in which to house certain programs are limited or nonexistent. (Examples: Health Careers, Horticulture, Child Care, Mechanical.)

4. There is no follow-up system developed to obtain information from graduates and students who leave school prior to graduation.

5. Placement services provided or arranged through the school district are quite limited.

DISTRICT POLICY & GOALS FOR CAREER EDUCATION

"... culture is activity of thought, and receptiveness to beauty and human feelings. Scraps of information have nothing to do with it. A merely well-informed man is the most useless bore on God's earth. What we should aim at producing is men who possess both culture and expert knowledge in some special direction. Their expert knowledge will give them the ground to start from, and their culture will lead them as deep as philosophy and as high as art."

Alfred North Whitehead

POLICY STATEMENT

Career education is recognized as a developmental process through which students discover their interests and talents, explore career opportunities, establish realistic and defensible career objectives, and develop a degree of employability.

The Board of Directors is dedicated to providing an educational program designed to equip all students with the skills, habits, attitudes, and understandings necessary to live and work successfully. To accomplish this goal, emphasis shall be placed on career education as a major component of the curriculum.

Career education will encompass all occupational areas reasonably available to students and will be a part of the instruction at all levels--elementary, intermediate, and high school.

The current Oregon State Plan for the Administration of Vocational Education (Career Education) will be used as a guide for developing career education in the Beaverton School District.

GOALS FOR CAREER EDUCATION

1. To plan and implement career education program in relation to what high school students do when they leave school.

2. To incorporate career education into the entire school curriculum

   --by providing appropriate awareness activities for students in the elementary schools.

   --by providing exploratory opportunities for students in the intermediate schools.

   --by providing sufficient opportunities for high school students to concentrate their studies in programs based upon the cluster concept.

   --by infusing the teaching and learning process in all areas with a "career consciousness."

3. To coordinate various parts of the total career education program.

4. To plan purposefully in all areas and at all levels for the development of work habits, skills, and knowledges essential for success in occupational life.

5. To inform teaching staffs about career education and to actively involve them in program development and implementation.

6. To provide, as a planned part of the educational program, ways for students to contribute to society, either through work or volunteer service.

7. To provide students with high quality career guidance to help them make appropriate career decisions. Students will be guided to select courses and curriculum which are related to their career interests, abilities, goals, and aspirations.

8. To make available to all students counseling, guidance, and placement services which will enable them to make a smooth transition to their roles beyond school.

9. To make career education objectives an integral part of the criteria used during the regular evaluation of school curriculum.

10. To actively seek community involvement in an effort to provide the most significant and relevant learning experiences for students.

11. To promote improved coordination of secondary career education programs with the programs offered at community colleges, technical schools, and other post high school institutions.

DESCRIPTIVE DATA

THE BEAVERTON COMMUNITY

The Beaverton School District is located in the eastern portion of Washington County adjacent to Portland. For many years the Tualatin Hills formed a geographical barrier between Portland and the Tualatin Valley. However, as transportation developed and Portland spread westward, the hills' effect as a barrier diminished.

The district was organized in 1960 from thirteen elementary districts and one union high school district. Today there are twenty-six elementary schools (1-6), five intermediate schools (7-9), and three high schools (10-12), with a total student enrollment of 19,187 (December 31, 1971). Presently, the Beaverton School District is the fourth largest in the state.

Students are transported to and from school by school district operated busses, but depend mostly on private transportation for other travel. Public transportation is quite limited.

The major employment in Washington County is in manufacturing (16,542) and in wholesale and retail trade (7,459). This represents about four-fifths of the total employment.* The employment in the Beaverton Area is dominated by electronic and electronic-related firms. Tektronix is the largest with approximately 7,000 employees. Warehousing and distribution firms employ significant numbers of people and the food processing industry is represented by four major firms employing nearly 400. Other large employers include GAF with 1,600 employees and General Telephone with 1,500.

Skippen** reported that 20.1 percent of the families in Washington County in 1960 had incomes over $10,000 compared with 17.7 percent in the Portland Metropolitan Area. In the Beaverton Area 46.9 percent to 59.3 percent of all families living in census tracts W-2, 3, and 4 had annual incomes of $10,000 or more. Skippen also reported that Washington County's median educational level for persons of twenty-five and over was 12.2 years. This compared with 9.8 years for the Metropolitan Area. The 1970 data is not available at this time.

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*State of Oregon Employment Division, 1969.

**Robert E. Skippen, A Study of The Employment Opportunities, The Human Resources, and Vocational Education Resources in Washington County (August, 1967).

POPULATION AND GROWTH ANALYSIS

The growth of Washington County and of the Beaverton School District, which contains about one-half the population of the county, has been substantially faster than the average for Oregon in the past twenty years. It is expected that this high rate of growth will taper off, but will still exist in the foreseeable future.

While Oregon population grew 16.3 percent from 1950 - 1960, Washington County increased by 50.5 percent. Similarly, the 13.4 percent growth for Oregon from 1960 - 1967 compares with a 38.8 percent growth for Washington County during the same period.* Information from Portland General Electric Company shows that the decade 1960 - 1970 brought a total Washington County growth in excess of 70 percent. PGE's projections show a slowdown in the growth of the county population to a rate of about 36 percent for the 1970 - 1980 period.

Contrasted with the above is a 91.34 percent population growth rate in the Beaverton School District during 1960 - 1970.**

Analysis of the data in Table I (Appendix D) reveals that the Beaverton School District population is relatively young. Nearly one-half of the population (35,233) is under 25 years of age and 28,800 are between 25 and 54. Only 7,289 are 60 and over. The median age of the district population is around 27 years.

During the period 1960 - 1969, the annual average growth rate for school enrollment in Beaverton was 7.2 percent. This rate has recently decreased substantially and the projection of future enrollments (see Appendix D, Table II) made by the Beaverton School District reflects the anticipation of further slowdown in the growth rate.

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* The 1967 Manpower Resource of the State of Oregon and Its Metropolitan Areas, (State of Oregon Employment Division).

** Beaverton Schools, 1972 Growth, Building & Sites Study, Exhibit 5.

The 1972 Growth, Building & Sites Study, Chart 2, projects student gains as follows: *

1972-73	3.2%
1973-74	3.2
1974-75	2.0
1975-76	1.2
1976-77	2.6
1977-78	1.4

These factors, relative to projected growth, become important considerations when planning expansion of programs or implementation of new courses of study.

* Beaverton Schools, 1972 Growth, Building & Sites Study, Chart 2.

STUDENT INTERESTS

Ohio Vocational Interest Survey

In 1970 the Ohio Vocational Interest Survey was completed by 109 sophomores selected randomly at Beaverton and Sunset High Schools. The particular information of concern here is based on questions developed locally and incorporated as a section of this Ohio Vocational Interest Survey.

One purpose of this section of the survey was to determine the methods by which young people learn about occupations. Coupled with this were questions relative to post high school plans.

A tabulation of the responses revealed only 21 percent of this sampling had discussed occupations with school personnel. A great majority of the students indicated a desire for further occupational information. About two-thirds of those wanting more information noted a preference for getting such help from someone directly involved in the occupation being discussed.

Many of this same group saw themselves as having plans which did not coincide with the expectations of their parents.

Post High School Plans	Student Desires	Parent Expectations
College (4 year)	44.0%	47.7%
College (2 year)	10.1	12.8
Vocational training	26.5	13.7
Undecided or no preference	19.3	26.6

Of particular importance are those two categories which show that nearly one-half the students did not express a desire for any type of college work. In the group desiring vocational training, it must be noted that only about one-half of them were supported by the expectations which their parents had for them. Also, of considerable concern, nearly one-fifth of those surveyed could identify no goal or plan.

Career Interest Survey, Boy Scouts of America

A student career interest survey instrument, made available by the Exploring Division of the Boy Scouts of America, was utilized in a 1971 study

of the interests of 3,744 students. This group included all students in the final semester of their 9th, 10th, and 11th grades in attendance at Beaverton public schools on the date the survey was conducted. No effort has been made here to distinguish between grade levels in terms of responses.

The format of this survey allows an individual to indicate first, second, and third choices of a career from a listing of 149 job titles.

A tabulation of first choices was completed and from this tabulation the following examples were chosen to provide some idea of the interests expressed.

Number of First Choices	Occupations
180	Airline hostess
131	Art
131	Professional sports
100	Skiing and winter sports
81	Music
64	Drama and theater
21	Salesmanship
12	Carpenter
11	Purchasing and marketing
9	Plumbing
4	Barber
2	Machinist
2	Metal fabrication
1	Labor Union apprentice
1	Manufacturing
1	Custodian
0	Appliance repair
0	Public utilities

Comparison of the indicated interests with projected work force needs shows a definite imbalance. For example, only eleven students indicated a desire for a career in purchasing and marketing, yet national surveys show 15 to 20 percent of the work force will be engaged in marketing occupations. In many other categories it is likewise evident that the choices made are not realistic in terms of future employment opportunities.

These data suggest that students are not making appropriate preliminary choices. Further, if students are using these interests as a guiding factor for planning their school programs, then the courses taken may be of little value for the careers eventually chosen.

STUDENT FOLLOW-UP

In the past there has been only a very limited effort to determine what students do in the years following graduation from Beaverton's high schools. One attempt that has been made is represented in Tables III and IV (Appendix D). Information about the Sunset High School graduating class of 1963 was gathered in the fall of 1964. The class was again studied in the fall of 1967, four years after graduation.

This study, as well as others conducted by the schools, received a high level of response the first year after graduation. In this case, 93 percent of the graduates responded. Four years later, however, the response was only 56.2 percent. This lower level of response begins to destroy the validity of the study. The primary reason for fewer responses is the inability of the schools to locate the graduates.

As the number of respondents declines, the makeup of the sampling tends to change. Note that in 1964, 58.3 percent of the respondents were attending a four-year college, whereas, the study in 1967 indicated 76.5 percent of the respondents attended a four-year college. Conjecture suggests that most of the respondents after four years were those who had attended college, and those who did not attend college were the ones not responding to the questionnaire.

Other areas might be examined and other questions might be raised to attack the validity of these sample studies. Let it suffice to say that the low percentage of responses, the unknown makeup of the sample, and the type of information sought cause the studies to be of limited value.

Studies should be designed to obtain an accurate and complete picture of the paths taken by graduates and students who leave school prior to graduation. This information would be helpful in the evaluation of curriculum and in improving guidance and counseling services.

REVIEW OF PAST EFFORTS

Efforts to develop career education programs in Beaverton over the past five years have been significant. The impetus for these efforts began when the Board of Directors appointed the Committee for the Study of Programs of Non College-bound Students. This committee made their report and recommendations to the School Board (Appendix C) in January, 1966.

Following the report of this committee, the Board created the position of Director of Adult and Vocational Education. A district-wide advisory committee on vocational adult education was created in December, 1966. This committee was very active in studying the problems of the Beaverton educational program and following up on the recommendations of the previous committee. Many of the activities reported below have been directly influenced by the work of this committee and their recommendations to the School Board.

Two studies have been conducted for the district by specialists in career education. In June, 1968, the district received a report and recommendations from Dr. Lynn A. Emerson (Appendix A) which provided very useable suggestions concerning the development of occupational education in the Beaverton Schools.

The most recent attempt to assess the needs of the School District in terms of career education was the study conducted by Dr. Allen Lee. The final report of this study (Appendix B) was made to the School Board on October 11, 1971.

School-industry cooperation has been promoted in several ways. The cooperative work experience programs emanating from the three high schools have spearheaded the movement. Each year, for several years, over 200 students have received on-the-job educational opportunities through cooperative arrangements with the business community. These training situations are primarily in sales and office work.

Some community firms have participated in more extensive cooperative efforts. St. Vincent Hospital and Raleigh Convalescent Home have provided clinical experiences for the health careers classes whereby students spend their class time in those institutions for a period of seven to nine weeks. Tektronix makes meeting rooms available for seminars, provides personnel to help develop school programs, and participates generously in teacher inservice programs.

Curricular changes have been made to provide students with more opportunites to receive career information and preparation. A broader range of exploratory classes are now offered at the intermediate level (grades 7, 8, 9) and programs based upon the cluster concept have been instituted in the high schools.

The addition of new facilities during the last few years has enabled the schools to initiate some of the new programs. These new facilities include the total complexes of Aloha High School and Mountain View Intermediate School, plus additional industrial education shop space at Cedar Park, Highland Park, Meadow Park, Whitford, and Beaverton High. The business education facility has also been expanded and improved at Beaverton High School.

Counseling and guidance activities have been directed toward improving career orientation. Units have been introduced into ninth grade programs to assist students to better understand themselves, their interests and abilities, and to encourage an exploration of several career possibilities. Two of the high schools have employed career counselors and operate job placement services.

A short review of significant activities in program development since 1966 is provided in the following summary:

School Year 1966:
- Non-College Study Committee, January, 1966

School Year 1966-67:
- Director, Vocational and Adult Education appointed
- Cooperative Programs expanded
- General Advisory Committee appointed

School Year 1967-68:
- Advisory Committee Interim Report
- Emerson Report
- Career Orientation unit initiated at 9th grade
- Director, Pupil Personnel appointed
- Professional Growth Policy for staff members changed

School Year 1968-69:

- Distributive Education
- Diversified Occupations in operation, BHS and SHS (two full-time instructors)
- Office Occupations Co-op, SHS, (one class)
- Advisory Committee Study of:
  - Health Occupations
  - Business Office Occupations
  - Marketing Occupations
  - Industrial Education
  - Landscape Horticulture
  - Child Care Services
- Staff Activity
  - Inservice Class - Seminars with Industry
  - Office Simulation program study

Summer 1969:

- Curriculum Committee Work established the following:
  - Industrial Education
    - --Construction Cluster
    - --Mechanical Cluster
    - --Metals and Plastics
  - Home Economics
    - --Food Services Cluster
    - --Child Care Services Cluster
  - Business Education
    - --Office Simulation program
    - --Marketing Cluster
- Teachers in Industry Summer Program (4 teachers involved)
- Summer Intern Program (5 students)

School Year 1969-70:

- Programs in Operation (OBE approved, reimbursed)
  - Distributive Education - AHS, BHS, SHS
  - Diversified Occupations - AHS, BHS, SHS
  - Office Occupations
    - --Co-op - AHS, SHS
    - --Simulation - SHS
  - Child Care Services - BHS
  - Food Services - AHS
  - Construction - BHS, SHS
  - Mechanical - BHS, SHS
- Industrial Arts Consultant
- Cosmetology (cooperative arrangement with Beaverton Beauty School)

School Year
1969-70 (Continued)

- Project Developed for:
  - Health Occupations Program
  - Preemployment class for SHS, cross discipline
  - Introduction to Aviation - BHS, SHS
- Strengthening of organization for Work Experience
- Advisory Committee
- Third Interim Report

Summer
1970:

- Curriculum Work
  - Health Careers
  - Child Care
  - Food Services
  - Industrial Education

School Year
1970-71:

- Added:
  - Health Careers - AHS, BHS, SHS
  - Mechanics Cooperative Work Experience - SHS
- Career Counselors - BHS, SHS
- Junior Achievement in conjunction with classes - BHS, SHS
- Needs Assessment Study conducted
- Two Participants in Leadership Training - OSU
- Counselor Inservice on Career Education - SHS
- Curriculum Work to articulate program
  - Industrial Education
  - Business Education

Summer
1971:

- Curriculum Work
  - Food Services
  - Industrial Education
  - Business Education
- Completed District Guide for Work Experience Coordinators

School Year
1971-72:

- Food Services Expanded - BHS, SHS
- Preemployment Class and Coordination with Explorer Post Program - SHS
- Expanded Junior Achievement - AHS
- Office Simulation - BHS

APPROVED REIMBURSED PROGRAMS

At the present time the high schools in Beaverton offer a variety of courses designed to develop the salable skills of students. When approved at the state level, certain of these courses qualify the district for reimbursement to help defray the added costs incurred in supporting such courses.

Two approved curricula, distributive education and office occupations, are offered at each of the three high schools. Two others are district programs headquartered at one high school and students are transported from the other schools. These are food services at Aloha and health careers at Beaverton. Approved construction and mechanics curricula are offered at Beaverton High and Sunset High. Child services is available only at Beaverton.

Aloha High as 75 students enrolled in the approved cluster curricula, Beaverton has 198, and Sunset has 152. Table V (Appendix D) provides a complete listing of the programs and enrollment.

EMPLOYMENT TRENDS

According to projections by the U.S. Department of Labor*, the fastest growing occupational groups in the next decade will be those including professional and technical, service, clerical, and sales workers. All of these will experience growth at a rate above average, according to Labor Department estimates.

In the same publication, the Labor Department summarizes expected employment growth by industrial groupings (Table VI, Appendix D). In this perspective, their projections indicate that:

--Employment trends of the past decade in the various industry sectors of the economy generally will continue in the '70's.

--State and local government will experience the most rapid growth--a 52 percent increase in employment.

--Services, with a 40 percent employment increase, and construction, with 35 percent, will follow.

--While manufacturing will grow only 11 percent, it will still be our largest industry in 1980.

--Agricultural employment will continue its historic decline--and by 1980 the nation's food will be grown by only three percent of the labor force.

Comparisons of national and Oregon employment projections (see Table VII, Appendix D) must be tempered by the realization that the available studies do not cover precisely the same time period. The fact that the Labor Department expects a 23 percent growth in total industrial employment from 1968 to 1980 while Oregon anticipated the same amount of growth from 1967 to 1975, suggests that Oregon employment will expand faster than the average for the nation.

Even with allowance for the above factor, it is apparent the expected 18 percent growth rate in state and local government employment for Oregon is significantly less than the 52 percent rate expected nationally. Partly offsetting this slow rate of growth in state and local government employment is Oregon's anticipated increase of 16 percent in federal government employment as compared with a projected national change of 10 percent.

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*United States Department of Labor, U.S. Manpower in the 1970's, Opportunity and Challenge.

Other strong areas in Oregon's economy include that of finance, insurance, and real estate where the state's rate of growth is expected to be 38 percent compared with a national rate of 24 percent. Important, also, is the projection that manufacturing in Oregon will grow at a rate of nearly one and one-half times the national growth rate.

Any comparison of the national and state data with that from the Portland Metropolitan Area is of extremely limited merit due to the differences in time periods covered. Table VIII (Appendix D) shows that three industries can expect an increase in employment at a rate in excess of the 38 percent growth anticipated for all industries. State and local governments are foreseen as employing 49 percent more people in 1972 than they did in 1964. Services will expand at about the same rate (50 percent). Finance, insurance, and real estate will show an increase in employment which is only slightly lower (45 percent) than the above mentioned industries. Complete and accurate updating of projections is necessary to identify those industries where the growth will support additional workers.

SPECIAL EDUCATION

The Beaverton School District operates an extensive special education program oriented to assist the handicapped child. Program areas include

--educable mentally retarded
--trainable mentally retarded
--emotionally disturbed
--chronically ill
--speech defectives
--psychological services
--extreme learning problems

There are 62 staff members servicing approximately six percent of the student enrollment. One type of class offered is a junior high work experience class where students receive their work experience within the school setting. A similar class is offered at the high school level with 22 students presently enrolled. These students receive most of their work experience in community training stations.

GUIDELINES
FOR IMPLEMENTATION

If we want an educational system designed to serve each individual and to develop his creative potential in a self-directing way, then we have work to do and attitudes to change.

Grant Venn

DISTRICT

The guidelines which follow are divided into four sections. The first section identifies tasks which are common to all levels of the Beaverton School District. In some cases, the tasks will most appropriately be initiated at the building level while other tasks will need to be carried out through the district administrative offices.

The remaining sections are directed to the three levels of school district organization--elementary, intermediate, and high school. The tasks identified in these sections are the responsibility of each building with appropriate assistance coming from the district office.

The tasks identified in the guidelines can be grouped in several distinct areas. These areas and the task which pertains to them are listed below:

Curriculum
Task: 2.1, 2.4, 2.6 - 3.3, 3.4, 3.5, 3.8, 3.10, 3.11 - 4.2, 4.3, 4.4, 4.5, 4.9, 4.10, 4.11

Evaluation
Task: 1.1, 1.10

Facilities
Task: 2.2 - 3.7 - 4.6

Guidance
Task: 1.4 - 3.2 - 4.7

Inservice
Task: 1.5 - 2.5, 2.6

Personnel
Task: 1.6, 1.7, 1.8, 1.9 - 2.7 - 4.8

Policy
Task: 1.1, 1.2, 1.3 - 2.2 - 3.1 - 4.1

Public Relations
Task: 1.2, 1.6, 1.12

Resources and Materials
Task: 1.6, 1.11 - 2.3 - 3.3, 3.6

Transportation
Task: 1.3 - 3.9

GUIDELINES COMMON TO ENTIRE SCHOOL DISTRICT

TASK	CONSIDERATIONS	TIMELINE
1.1 There will be a periodic review of the Master Plan for the Development of Career Education.	A review and alteration of the PLAN will occur annually and at such other times as the evaluation findings indicate the need. The district career education coordinator will be responsible.	Continuous
1.2 Advisory committees, made up of citizens from representative occupations, will be organized to assist in the development of career education.	The variety of committees and nature of their work are dictated by program needs. 1. District-wide advisory council to be concerned with career education, grades 1-12. Board appointed. 2. Sub-committees will be appointed to deal with specific program areas. To be coordinated through career education office in concert with buildings involved. 3. Advisory committee activities shall be coordinated through the career education office.	 Continuous As needed Continuous

TASK	CONSIDERATIONS	TIMELINE
1.3 Provide adequate transportation for students commensurate with the demands of the program in which they are enrolled.	Transportation to support the instructional program is essential. Consideration should be given to: 1. Assigning busses solely for instructional use. 2. Offering programs contingent upon students providing their own transportation. 3. Official sanction for teachers to transport students in private cars. 4. Adequate insurance coverage to protect students and teachers. 5. Careful identification of transportation requirements prior to program initiation. 6. Use of parents and community volunteers. 7. Seeking loans of vehicles from dealers.	Immediate and continuous

TASK	CONSIDERATIONS	TIMELINE
1.4 Establish for the entire district a career guidance system which will insure that every student will receive career information and counseling, will develop defensible career goals, and will plan an educational program that will lead him to the goal.	The leadership for the development of this system should come from the District Coordinator of Student Services. As the system becomes developed, it is assumed that: 1. Presently employed counselors will need inservice training. 2. Counselors employed in the future will have an understanding of career education. 3. Much of the guidance will have to be done by classroom teachers.	Data collection and planning - 1972-73 Implement pilot model 1973-74

TASK	CONSIDERATIONS	TIMELINE
1.5 Provide inservice programs on career education.	To develop a comprehensive career education program will require a great variety of inservice programs for teachers, counselors, and administrators. Each group will have their own peculiar needs, first to understand the concepts of career education and then to develop programs needed by the students. Consideration will be given to: 1. Special workshops, seminars, and courses. 2. Program visitation opportunities. 3. Work experience opportunities. 4. Developing information dissemination system. 5. Evaluation of effectiveness of inservice programs. 6. Coordination with professional growth plans for all certificated staff.	Immediate and continuous

TASK	CONSIDERATIONS	TIMELINE
1.6 Appoint a school-industry coordinator for the school district.	The enlarging concept of using community resources--people, equipment, facilities--as a normal part of the educational process requires careful and sensitive development. A person in this capacity would: 1. Work with business and industrial community to develop cooperative activities. 2. Identify community resources for teachers. 3. Provide coordination service for schools in use of community resources. 4. Interpret school programs to the community.	1973-74
1.7 Each school will assign one staff member as the primary resource person for the development of career education.	More rapid development of career education will result if someone on each staff has the leadership responsibility and special training to effect change. It is recommended that: 1. The resource person be enthusiastic, innovative, and a natural leader. 2. Special training opportunities be made available for the resource person. 3. Released time be provided for the resource person to work with the staff.	1972-73

TASK	CONSIDERATIONS	TIMELINE
1.8 Participate in the Oregon Vocational Education Leadership Development Program.	The district should employ an intern who is enrolled in the program. Benefits to the district will include: 1. Close working relationship with teacher preparation institutions in Oregon. 2. Continuous updating on career education programs around the state. 3. Additional and new leadership talents in the district each year. 4. An opportunity to observe potential full-time employees.	Yearly
1.9 Employ certificated personnel who are concerned about and have a positive concept of career education, and encourage teacher training institutions to incorporate career education programs in their curriculum.	The search for teachers with understanding and empathy for students holding a variety of career goals should be continuous. Strong consideration should be given to: 1. Teachers who have had multiple work experiences. 2. Teachers who have had special training in career education. 3. Teachers who are willing to participate in activities to learn more about career education.	Immediate and continuous

TASK	CONSIDERATIONS	TIMELINE
1.10 Research and development activities for career education will be a continuing endeavor.	If career education is to become a logically sequenced effort, grades one through twelve, which meets needs of students in Beaverton, continuous efforts must be expended. The work and ideas should emanate from building level and district level alike, and be coordinated through the instruction office. Activities will include: 1. Identification of student needs. 2. Review of curriculum projects across the nation. 3. Visitations to other school districts. 4. Implementing ideas of merit. 5. Continuous evaluation of program.	Ongoing
1.11 Expand the use of educational opportunities for students outside of the school buildings.	In keeping with the concepts of making education relevant to the real concerns of students and using community resources to maximum advantage, the schools should fully develop and promote: 1. Simultaneous enrollment opportunities in community colleges and vocational schools. 2. Investigate use of classrooms in the community. 3. Use programs such as Junior Achievement and Explorer Scouting.	

TASK	CONSIDERATIONS	TIMELINE
1.12 Develop and implement a planned and continuing program to achieve communication between and among the school employees and the people of the community.	Communication and public relations are a continuing necessity and each person should assume his/her share of the responsibility. Considerations should include: 1. Involving more citizens in advisory committee activity. 2. Conducting regular question and answer sessions through radio, television, newspapers, and public meetings. 3. Conducting community-school seminars. 4. Developing regular feature coverage of school programs. 5. Holding interdepartmental meetings to discuss programs. 6. Holding interschool staff meetings to discuss programs. 7. Employing professional public relations techniques and personnel to promote school programs.	Continuous

ELEMENTARY SCHOOLS

The primary goal for career education at the elementary school level should be to provide an occupational information program which is organized sequentially and leads to continued interest at the intermediate and high school levels of instruction.

A more specific goal of career education in the elementary school is to develop the following:

Primary

A. A curiosity in regard to what people do in the working world.
B. Wholesome attitudes toward all types of work and the worth of the workers.
C. Enlarged occupational horizons.

3 - 4

D. An awareness of the many occupations found in our society.
E. An in-depth understanding of the training, duties, and working conditions of people in some occupations.
F. Positive attitudes toward one's self, other people, and work.
G. An understanding of the interdependency of workers within our society.
H. An understanding of the part school plays in preparation for life.

5 - 6

I. Knowledge of jobs at the state, national, and international levels.
J. An awareness that successful performance on most jobs requires certain personal qualities as well as skills.
K. A knowlege of the areas of information considered important in making a life choice--the nature of the work, training, working conditions, etc.
L. An understanding that a realistic appraisal of one's capabilities and interests as well as liabilities aids the decision-making process.

Guidelines for developing a district career education program.

A. Emphasis should be on incorporating career education into existing curricular areas rather than on establishment of a separate program.

B. The current curriculum should be examined and areas identified which support the concepts of career education.
C. With due consideration of Beaverton's secondary career education program and of (A) and (B) above, the program should have a scope and sequence which assures each student's exposure to a wide variety of occupations during his six-year elementary experience.
D. The program should show the relationship between learning in school and its application to life outside of school.
E. The program should suggest books, audio-visual aids, speakers, tools of the trades, field trips, etc., which are now or can be made available.
F. An instrument should be included which will assist the teacher to evaluate his involvement with the career education program and his students' attitudes in this area.

Every classroom teacher should relate learning activities to the world of work. This will probably mean that the career education program at the elementary school will:

A. Be action oriented.
B. Emerge from questions important to children.
C. Stress wide-ranging exploration and minimize narrow choice making.
D. Not be given letter grades.
E. Start with jobs and positions held by parents of the children involved.
F. Expand outward from parents' jobs and from other jobs in the immediate vicinity to include jobs of relevance in the city, state, and nation.
G. Bring children into meaningful contact with a variety of workers at their jobs.
H. Rely more on occupational briefs prepared by children than upon commercial materials.
I. Not be overweighted in favor of amassing and digesting occupational information.*

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* See Opening New Vistas to Children Through Career Education by Dr. Richard Nelson.

TASK	CONSIDERATIONS	TIMELINE
2.1 Identify areas in the present curriculum which support the concepts of career education.	A committee will be appointed consisting of two teachers per grade level (1-6), a leader in curriculum development, and a person with some knowledge of the financial limitations and possibilities. The committee is responsible to: 1. Go through existing district guides and adopted texts listing sections appropriate for career education. The committee is responsible for determining the method of collecting information and compilation of findings. 2. Will survey teachers on a district-wide basis to determine specific activities used to promote career awareness.	April, 1972 June, 1972
2.2 Select pilot schools.	The instruction office will determine the number of schools and make the selection.	March, 1972

TASK	CONSIDERATIONS	TIMELINE
2.3 Compile a list of career education materials now available.	The committee should: 1. Use ERIC documents. 2. Use Washington County IED list of resources. 3. Use the resources of the District Curriculum Materials Center.	By June, 1972
2.4 Write a skeleton guide.	To prepare this guide, the committee will: 1. Obtain guides and bibliographies from other districts for review by committee. 2. Develop a scope and sequence 1 - 6. a. Include lists of resources. b. Include suggested activities.	July, 1972

TASK	CONSIDERATIONS	TIMELINE
2.5 Conduct inservice education in pilot schools.	Committee members working with the pilot schools will: 1. Develop objectives for inservice. 2. Determine organization and structure. 3. Provide materials. 4. Determine location. 5. Identify leadership and consultant needs. 6. Assess value of inservice program.	By late August, 1972
2.6 Expand career education concepts to all elementary buildings.	Repeat steps in 2.5	1973-74

TASK	CONSIDERATIONS	TIMELINE
2.7 Provide for coordinator of pilot career awareness program.	A project director will be named to oversee the entire project. The project director will be responsible to: 1. Direct the activities of the curriculum committee, Tasks 2.3 and 2.4. 2. Direct the inservice program for pilot schools. 3. Supervise the implementation in the pilot schools and effect communications between the schools. 4. Make contacts for community resources. 5. Conduct evaluation of pilot programs. 6. Direct 1973 summer workshop. 7. Expand program to all elementary schools, 1973-74.	June, 1972 - June, 1974

INTERMEDIATE SCHOOLS

The intermediate school is a transitional stage in the educational continuum of students. This is a period of time when each student is confronted with decisions concerning educational and career selection. These decisions require a great deal of information which the students frequently do not possess. A further limiting factor to such decison making is that the maturity of intermediate students is such that to require the making of specific vocational choices at this stage of development is often premature.

The intermediate school is a place where students should be involved in a variety of activities to become better acquainted with the world of work and their relevant interests and abilities.

Education at this level should be so organized as to make available experiences which foster a sequential approach to developmental tasks, to arouse awareness of the need to make preoccupational and occupational choices, and to orient adolescents to the kinds and sequences of choices which they will be called upon to make, and the factors which they should consider in making these choices. It should not require the making of firm choices, but should help students learn to find and use experiences which will foster a readiness to make vocational choices. It should help students make preliminary choices in ways which keep as many doors open as possible for as long a time as possible.

Counseling services should be provided which are an integral part of the educational experiences so that the student may be helped to explore his attitudes, interests, and abilities--both personal and work related. Counselors and teachers should cooperate in this effort to incorporate career exploration in all courses and activities.

TASK	CONSIDERATIONS	TIMELINE
3.1 Each school will submit a detailed plan for developing and implementing career education using the guidelines set forth in this Master Plan.	All of the Tasks 3.2 - 3.11 should be reflected in the building plan. In order to generate the building plan, the following activities are deemed important: 1. Name key person responsible within building. 2. Participate in appropriate inservice activities. 3. Develop staff understanding of concepts of career education. 4. Familiarize staff with Needs Assessment Study recommendations and what they might mean to school. 5. Identify areas of curriculum that have potential for career education activities. 6. Identify what is currently being done in career exploration within building. 7. Cause all departments to be involved. 8. Identify timelines to implement plan. 9. Estimate costs.	November, 1972

TASK	CONSIDERATIONS	TIMELINE
3.2 Provide a system whereby all students will have a logical sequence of classroom activities (grades 7, 8, 9) designed to develop the student's understanding of his interests, aptitudes, and abilities as they relate to educational occupational opportunities.	Accomplishment of this task will involve consideration of the following: 1. Include supportive involvement on the part of the guidance department. 2. Familiarize students with various career information sources and how to use them. 3. Emphasize individual interests, aptitudes, and abilities as the basis upon which students will make plans for their high school programs. 4. Acquaint students with the career cluster concept and with the opportunities available at the high school level. 5. Acquaint students with educational opportunities available at community colleges, trade schools, technical schools, universities, industries, armed forces, etc. 6. Familiarize students with employment forecasts and methods of qualifying for various occupations.	August, 1973

TASK	CONSIDERATIONS	TIMELINE
3.3 Develop a resource center in each school where students can readily receive accurate up-to-date and appropriate occupational information.	Resources must be available in each school which can be used in classrooms, the library, and the guidance center. Schools should: 1. Investigate systems in other districts. 2. Involve total staff in selection of system and resources. 3. Assure students easy access to materials. 4. Provide for follow-up by guidance staff. 5. Develop method for replacing outdated material. 6. Include written materials, film loops, tapes, etc. 7. Consider mobile unit.	August, 1973

TASK	CONSIDERATIONS	TIMELINE
3.4 Provide students with exploratory experiences in a wide range of avocational and occupational groups.	Much is being done at the present time. In some cases, however, efforts might need to be expanded and a redirection of course emphasis might be in order. Considerations should be given to the following: 1. Expand course offerings to allow students to explore all areas covered by the high school cluster curriculums, such as the current World of Construction (Mountain View) and Health Occupations (Cedar Park). 2. Provide hands-on opportunities in simulated and/or actual experiences as feasible. 3. Assure that all students will be enrolled in exploratory courses.	September, 1973

TASK	CONSIDERATIONS	TIMELINE
3.5 Infuse into the entire curriculum appropriate career exploration activities.	Career education activities and examples from the world of work will help make elements of the school curriculum relevant to life purposes and stimulate student interest and participation. Opportunities and appropriateness will vary with the subject area. In order to do this, teachers should: 1. Develop an understanding of opportunities and requirements of the world of work. 2. Become familiar with the interests and needs of students. 3. Identify occupational clusters to which each course offers a unique contribution. 4. Identify objectives of each course which reflect relationship of course work to the world of work. 5. Purposefully plan activities to meet above objectives. 6. Supply specific occupational information to students which would not otherwise be available through general guidance activities.	August, 1973

TASK	CONSIDERATIONS	TIMELINE
3.6 Establish procedures for utilization of community resources.	To use to advantage the resources of the community, schools should: 1. Assign liaison person to make necessary contacts with the community and to coordinate school's efforts through district's school-industry coordinator. 2. Compile list of available cooperating businesses and individuals. 3. Develop system to assure currency of lists. 4. Assure that appropriate recognition is given to individuals and companies assisting with school programs.	1973-74
3.7 Evaluate facilities and equipment in terms of capabilities to meet program objectives.	Each school should examine its present program and any that might be proposed in the future to: 1. Determine equipment needs based on objectives. 2. Determine facility needs and describe shortcomings. 3. Recommend changes with timeline for such alterations. 4. Provide cost estimates.	November, 1972

TASK	CONSIDERATIONS	TIMELINE
3.8 Develop procedures to assure interdepartmental cooperation to reach goals for career education.	An interdisciplinary approach to planning and developing programs is essential. Each school should: 1. Assign appropriate staff members the responsibility for coordinating efforts. 2. Organize workshops to formulate and evaluate interdepartmental plans. 3. Obtain information from other schools having programs in operation.	November, 1972
3.9 Identify transportation needed to support the educational program.	District-provided transportation for educational programs must be planned for and requested in advance of needs. Schools should: 1. Base their requests on objectives of the program. 2. Provide sufficient lead time to ensure delivery of needed busses.	November, 1972

TASK	CONSIDERATIONS	TIMELINE
3.10 Special provisions will be made for those students who are academically, socio-economically, or culturally disadvantaged and those who are handicapped to such a degree that they are not able to succeed in regular vocational educational programs.	The Beaverton School District operates a special education program designed to meet the needs of certain disadvantaged and handicapped children. In addition to those children in the special education program, there exists a number of students who do not succeed in the present school setting as evidenced by the rate of dropout and failure. To improve this situation, consideration should be given to the following: 1. Develop a system for identifying disadvantaged and handicapped students with emphasis on diagnosing their specific problems. 2. Provide for ongoing evaluation of each student identified as disadvantaged or handicapped. 3. Identify and utilize available resources which will improve the status of each student. 4. Help students capitalize on their strengths as a means of achieving a satisfying career. 5. Discontinue special help when it becomes evident that the student can succeed in the regular program.	June, 1974

TASKS	CONSIDERATIONS	TIMELINE
3.11 All proposed curriculum changes presented to the instruction office for approval will show evidence of efforts to articulate with preceding and following sequences.	To assure a continuous program of growth without gaps or duplication, it is important to give consideration to the following: 1. Intermediate courses should build upon competencies acquired at the elementary level. 2. Intermediate courses should help students develop abilities needed to assure success in high school.	November, 1972 Continuous

HIGH SCHOOLS

The high school curriculum should provide an opportunity for all students to continue the refinement of their career goals, and to prepare for the next step after high school. While there are many models to emulate, the career cluster concept holds much promise as an appropriate and feasible way to structure the curriculum.

The career cluster concept is based upon two assumptions: (1) secondary schools should be preparatory institutions for all students; and (2) the program should tie the curriculum to the goals of students in such a way that they are motivated while in school and better equipped to choose from among many alternatives as they take the next step after high school.

The high school can meet the needs of all students by developing a comprehensive pattern of alternatives for them to follow in preparing for entrance into advanced study or for entrance into the labor market. These alternatives should provide equally for students headed for careers as tradesmen, technicians, homemakers, businessmen, or professionals.

At this time, a concentrated effort must be made to increase the number and quality of alternatives open to students. For this reason, an emphasis is being placed on implementing occupational cluster curriculums that meet the needs of that portion of the student population (50 - 70 percent) which will not receive a baccalaureate degree. A logical beginning will be made by concentrating on cluster curriculum needs as identified by the Oregon Board of Education. After these areas of critical need have received attention, the school should then consider expansion of the cluster concept so that 100 percent of the high school students will become involved in planned programs.

The development of appropriate alternatives for students will require:

1. The identification of student interests, aptitudes and abilities.

2. Relating course offerings to student objectives.

HIGH SCHOOLS (Continued)

3. Counseling students into appropriate patterns.

4. Involving all teachers in planning and development.

5. Developing a satisfactory program for helping the student to understand both himself and the various roles for which he must prepare himself.

6. Infusing all classes with career information by emphasizing work-relevant attitudes and examples.

TASK	CONSIDERATIONS	TIMELINE
4.11 Each school will submit a detailed plan for developing and implementing career education using the guidelines set forth in this Master Plan.	All of the Tasks 4.1 - 4.11 should be reflected in the building plan. In order to generate the building plan, the following activities are deemed important: 1. Name key person responsible within building. 2. Participation of key person in appropriate inservice activities. 3. Familarize staff with Needs Assessment Study recommendations and what they mean to school. 4. Develop staff understanding of concepts of career education. 5. Identify areas of curriculum that have potential for career education activities. 6. Identify what is currently being done in career education within building. 7. Cause all departments to be involved. 8. Identify timelines to implement plan. 9. Estimate costs.	November, 1972

TASK	CONSIDERATIONS	TIMELINE
4.2 Establish long-range developmental plans for existing cluster curriculums.	It is expected that all efforts to effect changes in cluster curriculums will utilize the support available from the career education office. In addition, district-wide cooperation is encouraged to achieve the maximum results possible from work designed to revise courses. Each plan will include the following: 1. Review and update goals and objectives for each program. 2. Revise curriculums to meet goals and objectives. 3. Work actively with advisory committees. 4. Establish minimum acceptable criteria for each cluster. 5. Submit revisions, through career education office, to Oregon Board of Education for approval and financing. 6. Evaluate each program in terms of district goals and objectives. 7. Identify supportive and allied courses. 8. Insure that each cluster meets established criteria. 9. Develop cooperative procedures and techniques with each building. a. Occupational speciality course b. Interdisciplinary projects c. Work experiences d. Teaching resources e. Guidance (Continued)	November, 1972

TASK	CONSIDERATIONS	TIMELINE
4.2 (Continued)	10. Sponsor appropriate youth organizations. 11. Document needs to meet goals. a. Facilities and equipment b. Staffing c. Inservice training d. Other 12. Develop timetable to make changes. 13. Estimate costs.	

TASK	CONSIDERATIONS	TIMELINE
4.3 Systematically plan for and implement additional career cluster curriculums as the needs are identified, and expand existing offerings.	Individuals and groups will work with and through the career education office to implement additional clusters as needs arise. First consideration should be given to needs identified by the Oregon Board of Education. Appropriate steps to be taken are: 1. Identify need for course. a. Employment opportunities b. Student interest 2. Establish advisory committee. 3. Hire instructor(s). 4. Define goals and objectives to be met by proposed course. 5. Write curriculum. 6. Obtain necessary facilities and equipment. 7. Arrange for community work experience stations. 8. Submit plan to Oregon Board of Education for approval. 9. Provide for necessary transportation. (Continued)	

TASK	CONSIDERATIONS		TIMELINE
4.3 (Continued)	10. Develop cooperative procedures and techniques.		
	a. Occupational speciality courses		
	b. Interdisciplinary projects		
	c. Teaching resources		
	d. Guidance		
	11. Sponsor appropriate youth organizations.		
	12. Develop timetable for expansion of program if anticipated.		
	13. Anticipated program additions include:		
	a. Electronics	- SHS	August, 1972
	b. Mechanics	- AHS	August, 1972
	c. Metals	- AHS	August, 1972
	d. Construction	- AHS	August, 1972
	e. Ornamental Horticulture	- SHS	August, 1973
	f. Bookkeeping & Accounting	- AHS, BHS, SHS	August, 1973
	g. Graphics	- AHS, BHS	August, 1973
	h. Public Service Occupations		
	i. Hospitality & Recreation Occupations		
	j. Fine Arts and Humanities Occupations		1973-77
	k. Communication and Media Occupations		
	l. Environmental Control Occupations		
	m. Others		

TASKS	CONSIDERATIONS	TIMELINE
4.4 Design and develop a comprehensive work experience program.	The work experience program should be expanded to take advantage of the many opportunities available in the community. A three-phased program is envisioned which would include: 1. Exploratory experiences of a nonpay nature designed to increase student understanding of a particular occupation and his/her own work-related aptitudes and interests. 2. General work experiences which have as a primary goal the development of desirable work habits and attitudes. The work experience need not be directly related to the declared career goal of the student, but must be closely supervised by the school. 3. Cooperative work experiences for all students enrolled in career cluster curriculums. The work experience should contribute directly to the student's declared career goal. Steps to be taken are: 1. Establish supervision responsibilities. 2. Coordinate all efforts through the career education office. 3. Develop transportation guidelines. 4. Use the guidelines set forth in the District Coordinator's Guide for Cooperative Work Experience. 5. Identify places for work experiences.	August, 1973

TASK	CONSIDERATIONS	TIMELINE
4.5 Infuse into the entire curriculum appropriate career information.	Career education activities and examples from the world of work will help make elements of the school curriculum relevant to life purposes and stimulate student interest and participation. Opportunities and appropriateness will vary with the subject area. In order to do this, teachers should: 1. Develop an understanding of opportunities and requirements of the world of work. 2. Become familiar with the interests and needs of students. 3. Identify occupations to which each course offers a unique contribution. 4. Identify objectives of each course which reflect relationship of course work to the world of work. 5. Purposefully plan activities to meet above objectives. 6. Supply specific occupational information to students which would not otherwise be available through general guidance activities.	August, 1973

TASK	CONSIDERATIONS	TIMELINE
4.6 Establish plan to ensure that appropriate facilities are available for career education programs.	A committee will be appointed to study and prepare recommendations on facilities. The committee will consist of members of the Career Education Advisory Council, teachers, and administrators concerned with the use of facilities. The committee will: 1. Determine current status of facilities. 2. Develop list of projected needs. 3. Investigate ways to meet needs such as: a. Additional construction or remodeling b. Central specialized facility c. Lease d. Portable labs, such as trucks or trailers e. Community work stations f. Transporting students between schools for some groups g. Rescheduling (1) extended day (2) Saturday (3) extended school year (4) joint enrollment with adults 4. Set priorities and prepare recommendations. 5. Estimate costs.	November, 1972

TASK	CONSIDERATIONS	TIMELINE
4.7 Provide service for placing every student in the next step after high school, whether it be employment or further education.	All students, regardless of their goals following high school, deserve equal help in making the transition to the next step. It would be appropriate to emulate the efforts now expended on behalf of the college-bound students, thus: 1. All students will learn about education and job opportunities. 2. All students will receive assistance in matching their abilities and interests to opportunities. 3. Students will receive help in completing applications. 4. Follow-up information will be available to the schools.	August, 1972
4.8 Establish optimum student-teacher ratio in all cluster classes.	Most of the advanced cluster classes require a lower student load than the average high school class. For example, the recommended number of students for a distributive education class is 15. A construction class in which they are building a house should be small enough so it is a safe and efficient project, probably limited to 8 - 15 students. A maximum load for health careers should be around 55 students. Staffing needs to be determined on the basis of: 1. Student outcomes desired. 2. Time demands of each program in terms of student conferencing, individualized instruction, and community contacts necessary.	August, 1973

TASKS	CONSIDERATIONS	TIMELINE
4.9 Plan and implement consumer education units and make them available to all students.	An emphasis on consumer education as an integral part of developing a career education program is appropriate. Schools should consider: 1. Separate courses. 2. Units within existing classes, especially home economics, business education, and social studies. 3. Seeking grant money to facilitate planning.	August, 1973
4.10 All career cluster curriculums presented to the instruction office for approval will show evidence of efforts to articulate with preceding and following sequences.	It is imperative that the student be afforded the opportunity to progress smoothly in his educational growth. As he moves from one level to another, needless repetition or inadequate preparation would hamper this growth. To assure smooth transitions, it is important that: 1. Intermediate and high school offerings should be logical sequences. 2. High school and post high school offerings should be logical sequences.	Continuous

TASK	CONSIDERATIONS	TIMELINE
4.11 Interdisciplinary planning will be included in all career cluster curriculums presented to the instruction office for approval.	Several departments should be involved in planning and development of any one curriculum.	Continuous

EVALUATION

GENERAL EVALUATION MODEL

This section presents a general evaluation design to assess the career education program proposed for the Beaverton Schools. The evaluation model contains elements to be employed over a long period of time. Since details of the program are currently being formulated, the model is segmented into phases which are defined in terms of function or over time. Target dates for beginning and completing phases will be established when the program proposal is finalized.

Phase I

Phase I of the Career Education Evaluation Model will deal primarily with a description of "what is" as related to career education concepts issued in the Beaverton Schools. This description will have the community and school as its two major components.

Community: Prior to implementing the elements of the master plan for career education in the Beaverton Schools, baseline information will be collected about the community. Guidlelines for determining what information is to be collected will be the broad goals of the program as well as the data specifications set forth in the Oregon Board of Education's A Guide for Planning Career Education in Oregon's Secondary Schools and the District's Career Education Program Proposal. Once the identification of community information needs has been completed, an analysis of information already collected from current school district data gathering efforts will be made to determine what information is currently available about the community and that which is lacking. For the latter situation, the community information collected will center around: (1) a description of the community, (2) patrons' knowledge of career education concepts, and (3) their attitudes toward these same concepts.

Schools: Prior to implementing the elements of the master plan for career education in the Beaverton Schools, baseline information will be collected about the school environments. School environments are defined in terms of facilities, curriculum, students, and staff. As in community data collections, part of determining school information will be the data specifications contained in the Oregon Board's career education publication. In addition, baseline data will be defined by the career education elementary, intermediate and senior high program objectives. Furthermore, the data will

be grouped by school so that "within-school" gains can be assessed and between school comparisons can be made.

Schools/facilities — It will be necessary to collect data about individual school facilities to assess over time the effect of career education on facilities and/or the effect of facilities on career education.

Schools/curriculum — Part of describing "what is" will be to define the curriculum within each school. Since two of the initial tasks for personnel of each school will be: (1) to examine current curriculum for areas supportive of career education, and (2) to incorporate career education concepts in these areas, the by-product will be a basic description of the curriculum before and after the introduction of career education. Subsequently, an assessment will be made over time to determine if these career education elements remain in the curriculum, are expanded, reduced or modified.

Schools/students — The initial data about students should be described for in-school groups and out-of-school groups. The data collected will be related to the knowledge of and attitude toward career education concepts. As with the other variables, changes in knowledge and attitudes will be assessed over time. Follow-up measurement activities will be at regular intervals throughout all phases of the evaluation model. Any current and reliable student data existing in the district will be used in the student data base. Additionally, instruments will be designed to provide the supplemental information needed to complete the information about students.

Schools/staff — Information related to the staff's knowledge of and attitudes toward career education will be assembled prior to any inservice training and/or classroom career education. Existing reliable staff data will be supplemented by information gathered through locally developed instruments. Determination of changes in staff knowledge of and attitudes toward career education will be made over time and at regular intervals.

Phase II

During Phase II the evaluation activities will be related to the data base areas mentioned above. Actual course objectives contained under the umbrella of district-wide career education program goals and the more specific building level program objectives will serve as the bases for pre and post achievement and attitude measurements. These evaluation efforts will be designed and administered to determine the degree to which the goals and objectives of the program have been met.

Control and experimental grouping can be administered in the elementary schools since pilot schools will be selected for involvement during the 1972-73 school year. Therefore, the evaluation results will be comparative in nature interpreted in the light of those variables that can be controlled. It will be through these comparative analyses that effects of the career education program can be isolated. Sampling techniques will be employed so findings can be generalized to the larger elementary population. In addition, the pre and post evaluation activities will be initiated simultaneously with the implementation into the secondary schools of the master plan for career education.

Phase III

During Phase III the evaluation strategies developed and employed during Phase II will be continued in those schools that were pilots the first year and in the other elementary schools as they implement the program. All information gathered during this and all other phases will be related to the data base for detecting and analyzing change. Where possible, control and experimental groupings will be formed within a school and within course offerings so that causes of change can be more readily identifiable.

Permeating all phases of the evaluation effort will be evaluation of the career education inservice training programs. Selected inservice programs will be evaluated in terms of changes in participants behavior. This will be accomplished through pre and post testing and will cover knowledge and attitudes. Classroom observation techniques will be used to determine the extent of carry over from inservice training to instruction.

Statistical Procedures

It is anticipated that the data collected and measurement techniques used will be quantifiable and will lend themselves to a number of statistical techniques. Generally, these statistical procedures will be introduced into the model when

administratively and instructionally possible. As an example: sampling techniques will be used for the various strata to be evaluated. Random selection and random placement will be used when determining the samples of schools, curricula, students and staff. In group comparisons, statistical tests of significance will be used to better explain differences.

In all cases the data collection instruments will be formated in a manner to allow for computer processing of the data. "Canned" statistical computer packages will be used for analyzing the data and generating required group profiles. The actual statistics to be used will be determined prior to any career education activity that is to be evaluated.

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APPENDIX A

SOME SUGGESTIONS CONCERNING THE DEVELOPMENT OF OCCUPATIONAL EDUCATION

in

Beaverton School District 48

Prepared By

Lynn A. Emerson, Consultant

June 1968

DIRECTIONS IN WHICH THE BEAVERTON SCHOOLS SHOULD SEEK TO MOVE

If occupational education is to achieve its proper place in Oregon schools and to meet the changing needs of the people of the State some adjustments of considerable magnitude must be made. Much of the change lies in appropriate attitudes toward occupational education, as well as in changes in structure and methods. The suggestions which follow outline some of the steps that might be taken by the Beaverton schools to meet present day conditions and to look toward the changing future.

Plan the overall occupational education program in the light of what Beaverton high school students do when they leave school.

Some students will:

- Drop out of school before graduation
- Go to work immediately after graduation
- Enter a community college occupational curriculum
- Go to a private vocational-technical school
- Enter a community college curriculum designed for completion in a 4-year college
- Enter a 4-year college.

Some of these students will complete their post-high school study.
Many of them will drop out before graduation from the advanced study.

The overall program of the Beaverton schools should provide -- insofar as is practicable -- to meet the needs of all of these students, getting some of them ready for entrance into the labor market and others ready for entry into the appropriate post-high school institution.

Start the overall program with appropriate occupational education in the elementary grades.

"In the grades in which we teach children tool subject-matter skills, we condition them to music, art, drama, dance, social graces, and social understandings. We even now teach them foreign languages. We do all of this because we are told that children learn most readily in these impressionable years. Here, we say, habits and attitudes are formed which affect later educational performance and even life goals.

Can we not at levels and activities appropriate to their years begin to orient children to a future world of work and the productive activities of their minds and hands? Can we not teach them that this is respectable, desirable and rewarding? Are we not at this early age, through neglect, already conditioning them negatively to an educational process producing occupational and vocational competency while other learning emphases take precedence?" (Victor Spathelf, School Shop, June 1968)

Provide opportunity for occupational orientation for all students.

Such orientation is needed by all students, irrespective of their post-high school educational goals. This may well have an important place in the intermediate grades, and include a wide range of activities such as laboratory work, visits to business and industry, extensive use of visual aids, and the like.

Revise industrial arts programs toward closer alignment with present-day technological developments and trends.

The objectives sought through industrial arts need to be clearly defined, and the program implemented toward clear-cut goals. A major objective may well be that of developing in the student a better understanding of present-day technology. Some of this understanding may come through appropriate shop/laboratory activities. But the shop aspect is only one phase of the attainment of this objective. The activities of the industrial arts laboratory should be geared toward the stated goals. Appropriate activities in an industrial arts shop might help develop proper work habits. Or they might help in the development of hobbies, or in skills for home maintenance. All these may be desirable objectives.

Too often the traditional woodwork dominates industrial arts, to the exclusion of other activities. Working with resistant materials develops certain abilities in the student, but one may well question whether in our present-day technological age the activities in the industrial arts laboratories should be so limited.

If the objectives of the industrial arts program lie mainly in helping the student to understand today's world of work, some major changes appear to be needed in curriculum, equipment, and teaching. Industrial arts can play an important role in the total program of occupational education by providing basic acquaintance with major clusters of occupations, followed later by more intensive shop/laboratory activity in these clusters.

Design the various parts of the total occupational education program so that they are articulated with later portions and follow in logical sequence.

The occupational information activity of the elementary grades should lead into the exploratory orientation of the intermediate grades, and similarly through the advanced phases, including post-high school education.

Development of an overall program that will really meet the needs of students at all levels demands a systems approach rather than piecemeal changes. Each portion of the total should fit into its logical place and lead into the advanced stages. Planning thus should involve all levels of personnel, elementary school through high school, working together toward a common goal.

Develop within the high school a comprehensive pattern of "paths" which students might follow to prepare for entrance into advanced study of various types or for entrance into the labor market upon graduation.

Among the high school students will be found those who plan to enter 4-year colleges, many of them with no occupational plans for the future. Some will expect to enter one of the transfer curriculums of the community college. Some will look forward to occupational study in the community college in such fields as business, health occupations, technician occupations, agricultural related occupations, skilled crafts, and the like. Other students will hope to enter work life in some one of these various fields when he leaves school, including apprenticeship in a skilled craft, or employment with an industry which will provide such special training as is needed. Some students may desire to drop out of school as soon as the law permits; many of these are handicapped socio-economically or otherwise.

If the high school is to meet the needs of all these students it should provide logical preparation for what lies ahead for each student. This will involve basic courses needed for entrance into post-high school institutions, and to specific programs within those institutions. The needs of a student who plans to study engineering are quite different from those who desire community college training in such a field as automotive service, or motel management, or real estate. It is realized that programs cannot be provided in tailor-made fashion for each student, but approximations can be provided. Similarly it is difficult to provide the specific preparation needed by those students who expect to enter employment upon graduation. But much can be done if the school system wants to meet these needs.

The different "paths" students would follow through the school will have much in common. Basic general education is required for all, but the content and method of teaching may well differ for such students as plan to enter college and those of lower intellectual ability who might also be socio-economically handicapped.

If such a proposed program is to function effectively it is essential that a high quality guidance service be available, with a sufficient staff of well-trained counselors available to provide every student with all the help he needs. And it is essential also that the total program be so arranged that appropriate transfers from one "path" to another can be readily made.

The high school program as a whole should include appropriate occupational preparation for groups or "clusters" of closely related occupations, providing the basic understandings and skills essential for effective entrance into any one of several occupations in the cluster.

The bulletin prepared by the Division of Community Colleges and Vocational Education of the State Education Department outlines the clusters suggested for high schools of various sizes, together with curriculum content for each of these clusters. This may well be studied toward the end of selecting appropriate clusters for each of the high schools so that the program can be an integrated whole.

High school patterns - continued

An important part of the total program is that of cooperative work-study programs. Such programs not only provide applied occupational experience but develop acceptable work habits, needed by students in all occupational fields.

In developing occupational education programs of the "cluster" type it is essential that careful attention be given to determining the important basic skills and understanding common to many of the occupations in the cluster, and to avoid permitting the program to narrow to single specialty. In the mechanical maintenance cluster, for example, it is easy to fall into the trap of limiting the instruction to automotive work and to essentially limit the laboratory/shop to the functions of a service garage. Productive work doesn't contribute much to the goals that should be sought in basic instruction in a cluster. What is desired is ability in the student to apply his understanding and skills to a variety of mechanical situations.

Select the occupational clusters for the high school program in the light of the needs of the labor market served by the school.

The labor market which the graduates of a high school eventually enter may be close to home or at some distance. Persons entering semiskilled or skilled occupations usually find employment in the commuting area in which they live while attending school. Those entering technical or semiprofessional occupations may travel considerable distances for employment, moving to new locations.

Clusters designed to provide basic education for skilled and semiskilled occupations may well reflect the more prominent occupations in the area, although it is recognized that communities today do not differ greatly in their overall occupational opportunities.

In a city like Beaverton the needs of such a large employer as Tektronix, Inc. deserves careful attention, with basic instruction leading to advanced training in electronic technology as well as other fields.

Develop all occupational education programs as an integral part of the comprehensive high school.

Occupational education belongs in the main stream of education, with full recognition of its importance to society and to the individual. For too many years much of the vocational education of the United States has been carried on in separate vocational schools, which usually (but not always) carried an impression of somewhat inferior status. In some cases they maintained high prestige by excessively rigid selection of students, thus eliminating many who needed such instruction.

Every student deserves the opportunity of participating in the widely varied student activities of the comprehensive high school. The student who later may be a carpenter or an auto mechanic might be just as interested in music or sports as one planning to go on to college.

Plan all occupational education programs in the light of what is being done by other agencies that share responsibility for the total task.

Beaverton School District No. 48 has an important share in the total occupational education program of the area. Its main province lies with youth up through high school age. To some extent it has opportunity for service to those beyond high school age through its adult education program. Other agencies that share in the total task are apprenticeship, industrial and business training programs conducted by employers, private vocational and business schools, Office of Economic Opportunity, Department of Labor, and other agencies. Of special importance is the community college offerings available in the area.

Close coordination of effort is especially needed between the School District and the community college administration.

The overall plan should provide for special attention to youth with special needs.

This group includes youth with socio-economic handicaps, youth requiring remedial education to enable them to undertake occupational education effectively, slow learners, and persons with other handicaps. Federal subsidy for vocational education makes special provision for such programs, and growth in this field nationally has been rapid in recent years.

Plan purposefully for the development of work habits essential for success in occupational life.

Too often in the planning of occupational education programs the main emphasis in curriculum development has been on the technical skills and knowledge required for the job, with little direct attention given to the important aspect of proper work habit development. If definite results are to be expected along this line, definite planning is needed for the inclusion in the program of learning situations that will produce the results desired.

Design all new programs and new physical plant to permit reasonably rapid changes to meet changing conditions.

Changes in occupational life are taking place with extreme rapidity. Educational programs need to keep in phase with such changes. Planning that will anticipate such change is essential.

Expand the work-study program to meet the needs of all high school students who would benefit from them.

Cooperative work-study programs are applicable to most occupational fields -- office, distributive, industrial, health, and other occupations. Careful planning is needed

in locating desirable jobs, developing student interest, and in maintaining proper supervision. Such programs enable the school district to expand its range of occupational education far beyond what can be offered within school buildings.

Strengthen the guidance service of the whole school system in order to provide high quality vocational guidance as well as high quality educational guidance for all students at all levels.

Educational planning looking toward occupational life appropriate to the individual student requires counseling assistance as well as changes in present-day curriculums and curriculum emphasis. Vocational guidance is the process of helping an individual choose, prepare for, enter, and make progress in a desirable occupation. To fulfill all these steps will require help in making choices, curriculums that will provide the education needed, and placement and follow-up service after the student has left school. Perhaps a part of this task must be done by other agencies. But if it is to be done effectively the foundations must be laid in the public schools.

If each individual student is to be served effectively, the guidance function will start in the elementary grades and be carried on throughout the school career. Such service will demand enlarged guidance staff and increased occupational understanding on the part of counselors. Without effective guidance service it is doubtful whether an expanded occupational education program can be justified.

Make increasing use of the newer effective educational media.

Group instruction needs to be supplemented by individual learning situations, and carrels are finding increased use. Programed instructional materials in all fields, video tape, closed circuit television, and the use of the computer will be found in the modern school of tomorrow.

Develop team teaching as an integrating feature of many programs.

Bringing together the teachers of general education and occupational education subjects helps both groups to understand each other better, and to bring about more effective teaching.

Develop plans to keep the teaching staff up to date technically as well as educationally.

Planned work experience in appropriate industrial, business and governmental establishments for all teachers, academic as well as vocational, may well be utilized, if suitable arrangements can be made. Carefully planned visits to such establishments, designed to let the teachers see what is happening in present-day work life, and carried on regularly, provide a continuing contact with changing

conditions. Seminars with representatives from these establishments constitute another means of maintaining such contacts.

Make definite plans for periodic review of curriculums, course of study and instructional materials.

This needs specific planning: otherwise it probably will not be done. In a world of work which is changing as rapidly as is that of the present it is essential that stock be taken at frequent intervals to make sure that the program is in phase with current conditions.

Plan for periodic evaluation of the results of the program.

No manufacturer would stay in business long if he did not give attention to quality control during the manufacturing process and product evaluation when in service. Occupational education programs need similar checking. Recent Federal legislation requires such evaluation on the part of state education departments: and they, in turn, should require it from the local communities. Follow up of graduates with respect to their success in work life or in advanced study will give some measure of the effectiveness of the school program, and provide the school with suggestions for improvements.

APPENDIX B

REPORT TO THE BOARD

THE PLANNING AND DEVELOPMENT STUDY FOR

CAREER EDUCATION

IN

FOURTEEN BEAVERTON SCHOOLS

October 1, 1971

Prepared by: Allen Lee, Research Professor in Education
The Division of Continuing Education and
Oregon State University
Oregon State System of Higher Education

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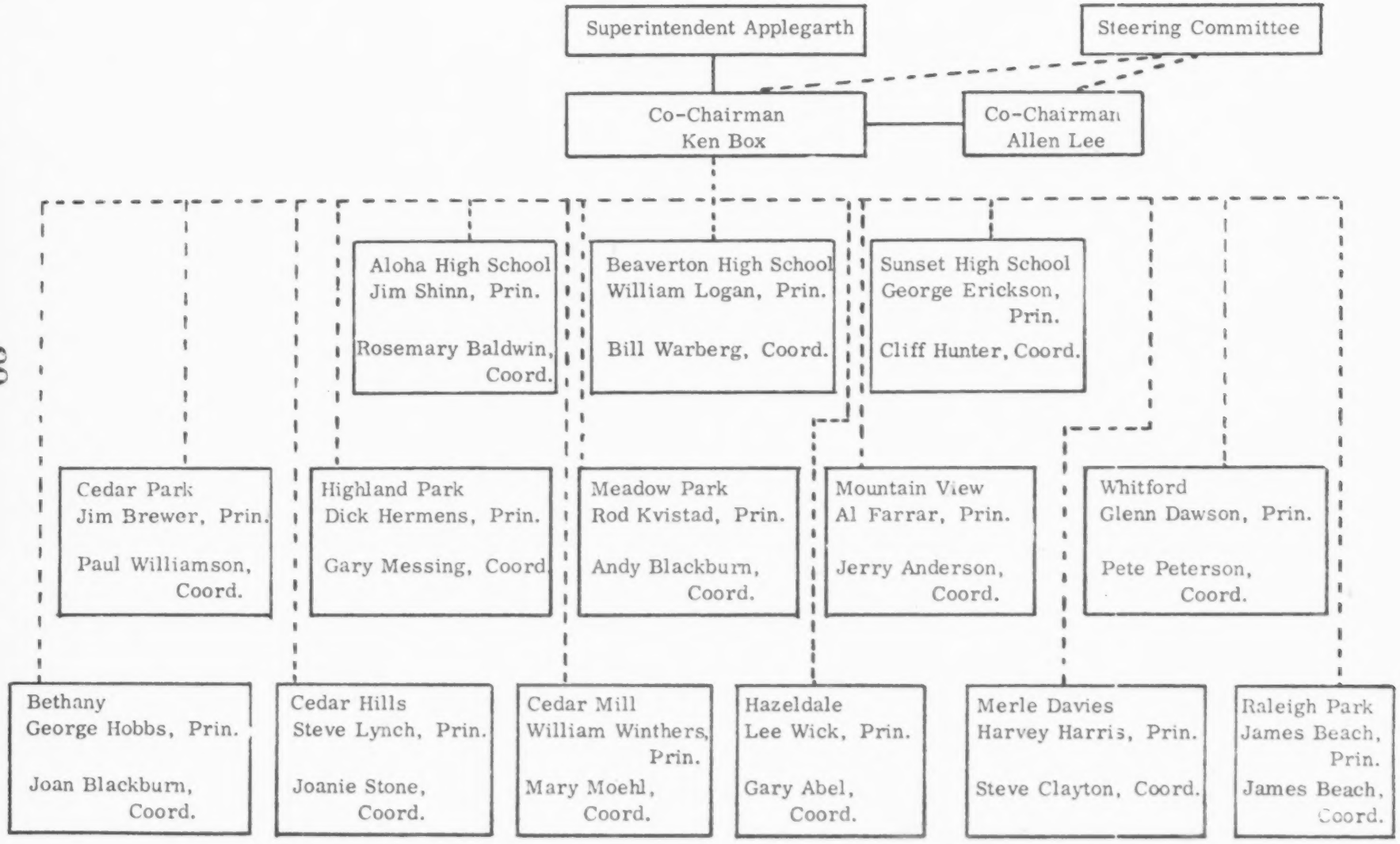
SCHOOLS AND ORGANIZATION

FOR THE STUDY



DISTRICT STEERING COMMITTEE*

Don Blanchard	Teacher, high school	Sunset High
Ken Box	Director, Vocational Ed	District #48
John Daggett	Teacher, Grade 4	Barnes
Don Hunt	Curriculum Vice Principal	Highland Park
Zeno Katterle	Director, Secondary Ed	District #48
Jack Lind	Director, Planning	District #48
Bill Logan	Principal, high school	Beaverton High
Marybelle Marshall	Counselor	Cedar Park
Walt Munhall	Teacher, high school	Aloha High
Gene Park	Asst. Supt. Instruction	District #48
Kay Thompson	Teacher, Grade 3	Raleigh Park
Bill Winthers	Principal, elementary	Cedar Mill
Boyd Applegarth (ex officio)	Superintendent	District #48

*Assignments at the time the study was initiated

Definitions Regarding Organization

of The Study

1. Career Education: For the purpose of this Study, "Career Education" encompassed:

   A. Orientation, exploration, guidance (or counseling), general and specific instructional activities which might pertain to career choice and preparation. It includes all grade levels.

   B. Such areas as "vocational education" and "occupational education" which may or may not be state or federally reimbursed.

   C. All of those areas of activity encompassed by the Oregon State Board of Education's position paper: "Career Education in Oregon," August 1970.

2. Community Committee: The groups of community people (generally excluding school personnel) who were involved in Phase Two of The Study.

3 Cochairmen: Refers to Ken Box and Allen Lee who were responsible (to Superintendent Boyd Applegarth) for the conduct of The Study.

4. Coordinators (Study): Refers to the persons (designated by the principals of the 14 schools participating in The Study) who were responsible (to their respective building principals) for the first or Self-Analysis phase of The Study.

5. Schools: Refers to 14 elementary, intermediate and high schools included in The Study.

6. Staff Committees: The groups of school persons (teachers, administrators and students) designated to participate in Phase One (Self-Analysis) of The Study.

7. Steering Committee, The: Includes: Don Blanchard, Ken Box, John Daggett, Don Hunt, Zeno Katterle, Jack Lind, Bill Logan, Marybelle Marshall, Walt Munhall, Gene Park, Kay Thompson, and Bill Winthers. These persons were appointed by Superintendent Applegarth to serve as an advisory group to work with Ken Box and Allen Lee in coordinating The Study.

8. Study, The: Refers to The Study of Career Education herein reported and which included three phases of activity:

   Phase One: Self-Analysis by teachers, administrators and students in 14 schools, respectively in the Washington County School District #48 (Beaverton).

   Phase Two: Reactions and perceptions of a cross section of the community in each of the 14 schools included in The Study, respectively.

   Phase Three: Preparation of 15 reports (one for each of the 14 schools included in The Study, and a district-wide composite).

ACKNOWLEDGMENTS

The undersigned and assistants (Norman Smith and Kirby Brumfield) are deeply appreciative and desire to acknowledge the excellent and cooperative assistance which staff, administration and community gave to this Study.

Teachers in the school gave valuable time in responding to questions and assisting with arrangements for data collection.

The school principals and their assistants gave generously and willingly of their time, perceptions and reactions --- and this also was of vital importance. The assistance received from custodial and other staff in handling phone messages, opening the building for evening meetings and arranging light refreshments was both helpful and gratifying.

One of the highlights of this study has been the enthusiastic, sincere and knowledgeable manner in which various lay persons gave of their time and energy. Undoubtedly, people of the community represent the District's greatest asset.

The combination of competent and keenly interested citizens plus a school staff which is superior to many or most in the state constitutes a significant advantage for youth of the community.

The perceptive comments of so many persons in the school and community, and their frank and constructive suggestions have been of much value to this study.

The District Steering Committee gave valuable advice and direction to the Study and their significant assistance is both acknowledged and appreciated.

Eugene Vinarskai (Career Education consultant with the Washington County Intermediate Education District), and Richard Schmidt (consultant with the Oregon Board of Education) frequently consulted on various aspects of this Study. Their participation, advice and critiques have been extremely helpful and valued.

The District's central administration, and especially Superintendent Boyd Applegarth and Director of Vocational Education, Ken Box, have given us complete freedom to "tell it like it is," and have fulfilled our many requests for various arrangements effectively and promptly.

These factors have made our work with District #48 staff and constituents a challenging and worthwhile experience for us personally. Hopefully your consideration of the findings of this Study will result in improvement of education in Washington County School District #48.

Allen Lee

INTRODUCTION

A. The Purpose of The Study: To improve education, especially that which is referred to as "Career Education." The intent of this study was to formulate a report and specific recommendations for actions which might be implemented and result in the improvement of career education in Beaverton schools.

B. Assumptions Inherent in The Study:

1. Continually changing and expanding environment, needs, desires and challenges demand periodic changes and improvements in education.

2. Instructional changes are periodically in order.

3. Changes in organization, policies, philosophies and administration need to be made from time to time in order to facilitate the improvement of instruction.

4. Changes and improvements in education should be made to reflect the goals and needs of people, and these should be identified and interpreted by cooperative efforts of the general populace (community), professional educators, and students.

C. Procedures for The Study: The Study was divided into three phases:

1. Phase One: Self-Analysis, wherein students, teachers and administrators identified and examined strengths, weaknesses, needs and suggestions pertaining to career education in Beaverton schools.

2. Phase Two: Community Perceptions and Reactions, wherein a cross section of people in the communities (for each participating school and for District #48) noted pertinent questions, identified and discussed their own desires and goals and perceptions of education, and formulated suggestions for improvement.

3. Phase Three: Preparation of A Report and Recommendations. This summarizes the findings of Phase One (Self-Analysis), the findings of Phase Two (Community Reactions), and gives consideration to the perceptions of various specialists in the fields of education and career education. The final report is submitted to the Superintendent for appropriate dissemination and action.

The Study was coordinated by Cochairmen (Ken Box, Representing the Beaverton Schools, and Allen Lee, a research professor with the Oregon State System of Higher Education). Superintendent Applegarth appointed a special Steering Committee which worked with the two Cochairmen in the conduct of The Study. The building principal in each one of 14 schools designated a "coordinator" from the school staff, respectively, who coordinated details of Phase One, the Self-Analysis.

In addition to Cochairman Allen Lee, outside consultants included Gene Vinarskai, career education consultant with the Washington County Intermediate Education District and Richard Schmidt, career education planning expert with the Oregon State Board of Education.

The Study included 6 elementary, 5 junior high and 3 high schools in the Beaverton district. It included such dimensions of career education as the following:

A. Philosophy and Objectives

B. Communication and Public Relations

C. Inservice Training

D. Community Resources

E. Planning and Implementation

This study focused upon that which has been defined as "Career Education." Because this is (should be) an integral part of the District's total education program, it was not studied in complete isolation from the rest of education; however, insofar as possible the study and the report thereof focused upon Career Education as it existed prior to the start of the 1971-72 school year.

This career education planning and development activity was facilitated by a grant from the Oregon Board of Education.

I. Strengths

A. Philosophy

1. Many community members recognize that the task of preparing youth for the world of careers must be accomplished in the home environment and in the school.

2. A great many staff at all grade levels recognize the need for a better understanding of Career Education.

3. Significant numbers of staff at all grade levels evidence a desire to improve their school curriculums by the addition of more career education.

4. Elementary school staffs display strong enthusiasm for utilization of career education to enhance motivation and achievement in such basic subjects as reading, writing and mathematics.

5. The Washington County Intermediate Education District has made an obvious commitment to Career Education, as evidenced, for example, by two staff specialists in career education.

6. The District (Beaverton Schools) has some central administrative personnel exceptionally well-qualified in the philosophy of career education.

7. The District (Beaverton Schools) has some teaching staff whose career education qualifications are excellent (for example, in Health Occupations and in Cooperative programs).

B. Communications and Public Relations

1. Relationships and communication between the District and some major firms or industries are outstanding (for example, Tektronix, Electro-Scientific Industries and St. Vincent Hospital).

C. Community Resources

1. Many members of the business and industrial community voice strong willingness and desire to provide advisory assistance on course content, to serve as supplementary resource persons in the classrooms, and to lend their facilities and personnel for field trips.

2. The community is wealthy in terms of its resources in people, in diversified business and industry, in natural resources, and in geographical proximity to other resources.

3. Throughout the District are scattered examples of good use of community resource personnel (for example: the Explorer Scout program at Sunset, the Junior Achievement program at Beaverton and Sunset Highs, and the differentiated staffing program at Mountain View.)

4. Community college services are available to serve post high school needs in career education in the District.

D. Planning and Implementation

1. The counselor-student ratio is superior to that of many areas of the state.

2. There are some laudable efforts between high schools and intermediate schools to articulate career education programs; for example, District-wide curriculum planning efforts in Home Economics, Business Education and Industrial Arts.

3. There exist some excellent programs in developing awareness of careers and in exploration of careers in elementary and intermediate schools; for example, the World of Construction class at Mountain View, the 5th grade class at Raleigh Park under Bob Hamilton and the Industry Exploratory program at Meadow Park under Andy Blackburn.

4. There is widespread recognition of the need for evaluation of career education programs.

5. There is an excellent District-wide Health Careers program involving wide use of community facilities for clinical experience.

6. There are some exemplary cooperative Work Experience programs in the District in the areas of Marketing and Office Occupations.

7. The District has some good facilities for Homemaking, Industrial Arts, and Business Education.

II. Weaknesses

A. Philosophy

1. In the majority of the schools there is either an inadequate or no philosophy encompassing career education.

2. A majority of staff and community have an inadequate concept and comprehension of career education as espoused (for example) by the Oregon Board of Education; many have an outmoded concept equating career education with the former "Smith-Hughes vocational education" perceived to be rigid, low-level, not for the talented (academically or otherwise) and a second-class education.

3. Many staff and community people are primarily concerned with preparation for a traditional 4-year college (baccalaureate) degree.

4. Career counseling is very inadequate (both in quantity and quality).

5. Development of some degree of "employability" * is not a specific element of the District's philosophy for education, and is not a policy of the Board.

B. Communication and Public Relations

1. The community is frequently quite unaware of ongoing exemplary activities in career education.

2. Community people are too often unaware of needs and the potential of career education for solving certain urgent educational needs.

3. In some instances, the community knows of deficiencies or undesirable traits which characterized the District as long as 10-15 years ago, and is unaware of significant changes now in effect. For example, administrative policy changes, new programs in career education, the nature of course content, use of advisory groups, action upon previous studies, etc.

C. Community Resources

1. There has been inadequate use of community advisory groups especially at (but not restricted to) the individual school level.

2. Community resources are not brought into the classroom nearly as much as they should be (especially people from business and industry who can "tell it like it is").

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* Here defined as possessing minimal skills and knowledge for job entry at high school graduation, and at the 5th grade (for example) perhaps just the minimal essentials such as attitude and punctuality necessary for baby sitting or mowing the neighbor's lawn.

3. Too much of career education is limited to the classroom; that is, students are not taken out into the business and industrial locations to utilize the personnel, facilities and equipment available there.

D. Planning and Implementation

1. There is very little systematic followup to ascertain what happens to graduates and dropouts, to identify factors influencing success and failure, and to take appropriate action.

2. Too frequently, the community unjustly condemns the school. For example, a taxpayer may not really know the nature of instruction in a given career education course; he may hear a rumor or receive a report which is atypical; he may guess at what he (erroneously) surmises, he may condemn the school unfairly.

3. Too frequently content of career education courses is inconsistent with current needs and practices in business and industry.

4. The needs and potentials of Career Education are inadequately considered in the total curriculum, especially so in the design and conduct of basic education (such as reading, writing, science, math, social studies, etc.)

5. There is inadequate understanding and application of the "cluster concept" of career education. (Note, for example, the position paper and the cluster guides published by the Oregon Board of Education.)

6. In some instances, staff believe they have a <u>good</u> career education program, but the program is grossly inadequate in both quantity and quality.

   <u>Comment:</u> Sometimes staff refrain from getting involved, in the erroneous belief that "the other guys" are doing the job. Also, some of the "cluster programs" are clusters primarily in name only or do not have the minimum cluster components. (For example, the health careers cluster is "head and shoulders" better than others, but even it has inadequacies.)

7. There is very little emphasis upon the identification of potential dropouts and the planning and implementation of preventative action.

8. The facilities for Industrial Education and Business Education at Sunset High are too limited for adequate exploratory and career-based programs in general.

III. Recommendations

A. Philosophy

1. Central administrative staff should provide leadership to bring about the development and establishment of a District-wide written Philosophy and Goals for Career Education.

   Comment: This should include representatives of all grade levels, the community, the Washington County I.E.D., Oregon Board, and other consultants.

2. Central administration of the District should cause one person in each school in the District to be designated with the responsibility for bringing about the development and establishment of written Philosophy and Goals for Career Education in the respective schools.

3. District central staff should develop plans for the establishment of a single track of career education for all students (college and non-college bound).

   Comment: Every student (rich or poor, academically talented or other, college bound or not) needs career education*. Those students who are going to college will (in most instances) need to earn some money while going to college. Career education (k-12) should be designed to meet the needs of all students.

4. District central staff should exert leadership to develop suggested policy for District-wide assumption of responsibility to develop some degree of employability in every student.

5. District central staff should develop suggested policy for District-wide assumption (by every elementary, intermediate and high school) to assume some degree of responsibility to assist in the placement of every student who leaves the school by graduation or dropout. .

B. Communication and Public Relations

1. Central administrative staff should develop and implement a planned and systematic continuing program designed to achieve better communication between and among the professional staff of the District and the people of the community.

   Comment: Appropriate community and local school staff representation should advise on this development. Consideration should include more use of advisory committees, regular question and answer sessions through various media (such as television, radio, newspapers and public meetings).

*Note definition on page -iii-.

2. Each school in the District should develop and implement its respective systematic plan for communication with the community.

   Comment: These plans should be compatible with, articulated with, and complement the District communication plan. Some one person in each school should be designated with specific responsibility for the conduct of the respective plans.

3. District central staff, with appropriate consultants, community and school representation, should prepare District-wide principles and guidelines for establishment and use of advisory committees (District and individual school), with due consideration to the strengths, weaknesses and operation of existing citizen committees.

C. Inservice Recommendations

1. Selected staff from elementary, intermediate and high schools, District Board members and central staff should travel to observe proven and promising innovative programs of career education in Oregon and in other states.

   Comment: Experience has demonstrated this to be one of the best means of effective communication and inspiration. Upon request, suggestions for programs which merit observation can be obtained from the Washington County Intermediate Education office, the Oregon Board of Education, and the author of this report.

2. District central staff with a committee including school staff, counselor, and community representation, should design and conduct inservice for all school counselors in the District to improve the availability and quality of career counseling.

   Comment: The purpose should be to develop and enhance counselor activities which will result in greater awareness of the world of careers (on the part of the counselors and consequently students), more thorough orientation of students to the world of careers, the broadening of student horizons ---in order that students will have a wider field for career selection at whatever time or times that it may be appropriate for such decision making by the student.

3. Central office staff should provide leadership to cause each school in the District to plan and conduct interaction meetings involving parents, school staff and students.

   Comment: The purpose of these meetings should be to identify common concerns and problems pertaining to career education, to bring visibility to various viewpoints, to discuss current and desirable viewpoints, and to suggest prospective courses of action (by parents, students and the school) which are promising for the improvement of career education.

4. District central staff, with appropriate school representation, should exert leadership to design and conduct inservice training in the cluster concept of career curriculum design.

   Comment: The cluster concepts afford an exciting solution to career education problems and criticisms. There are several variations and choices to be made so far as concepts and procedures are concerned. Very few staff have had adequate orientation or experience with the cluster concept. Expert consultative assistance is available through the Oregon Board of Education and Oregon State University.

5. District central staff should exert leadership to cause the design and implementation of inservice for elementary and intermediate teachers and administrators to study existing curricula, to identify elements therein which contribute to the development of career awareness and orientation, identify elements which should be added to existing course content, and to incorporate desirable changes and additions.

   Comment: The purpose of this inservice should be twofold: (1) to improve awareness, orientation and exploration in the world of careers and (2) to enhance motivation and achievement in reading, writing and mathematics through the introduction of more relevant and meaningful subject material in the curriculum.

6. The Superintendent should charge one central staff person with responsibility to bring together curricular personnel for all grade levels for the purpose of planning and implementing a total program of curricular improvement through increased attention to career education.

   Comment: Mr. Ken Box, Director of Career Education for the District, should serve as an advisor to the group, but he should not be given the major responsibility for coordinating this activity. Washington County I.E.D. personnel (Mr. Gene Vinarskai) should be utilized for consulting assistance, and possibly Oregon Board and Oregon State University personnel.

7. The Central staff should arrange inservice for all school staff designed to prepare them to recruit and use resource persons from business and industry.

   Comment: Teachers need to improve their skills in recruiting community persons to enhance learning in the classroom and outside of the classroom. Adequate knowledge in how to recruit and use such help is of prime importance to this form of differentiated staffing.

D. Community Resources Recommendations

1. District central staff should exert leadership to bring about the development of principles and guidelines for the involvement of appropriate business, industrial and other community representation in the improvement of curriculums in career education.

   Comment: The purpose should be threefold: (1) to acquaint the community with that which is now being taught; (2) to identify community (business and industry) concepts concerning what should be taught; and (3) to improve course content by incorporating improvements so identified.

2. District central staff should exert leadership to bring about the establishment of systematic procedures and guidelines for bringing resource people in various career fields into the classrooms on a vastly expanded scale.

   Comment: Initially, emphasis should be upon special guest speakers without financial remuneration. Proper use of such persons will lend credibility, "tell it like it is," reinforce and supplement what the classroom teacher provides.

3. District central staff should exert leadership to bring about the establishment of guidelines and systematic procedures for taking a vastly expanded proportion of education at the elementary, intermediate and high school levels out of the traditional school facilities and into the community to utilize such great resources as do exist in the community.

   Comment: It will never be possible to employ on a full-time basis staff who have all of the knowledge and experience needed for quality career education. It is possible to utilize vast community resources (quite often without financial outlay) which could not otherwise be made available for career education. The practice will also facilitate better communication and understanding between school and community. Resources of this type include people, facilities and equipment.

E. Planning and Implementation Recommendations

1. District central staff should exert leadership to bring about the design and implementation (in several District schools) of an improved career education in successful business management.

   Comment: Many community people consider this to be a deficiency in the schools today. Two approaches merit consideration: (1) increased attention to this facet which may exist in current classes; (2) design and implementation of one or more new courses focusing upon this area.

2. The Superintendent should pinpoint responsibility for the design and implementation of an appropriate follow-up system to ascertain the effectiveness of District instruction for those students who go to work after leaving the schools of the District.

Comment: The purpose should be to identify instructional elements which influence success and failure on the job, and to precipitate changes in curricula and methods of teaching accordingly. Also, attention here should focus upon those who become employed as well as those who go on to further education.

3. The District central staff should employ an expert proposal writer to work with District staff to secure funds from the Oregon Board of Education, the U.S. office of Education and elsewhere to implement those recommendations (in this Report) to which the District elects to give priority.

   Comment: Increasingly, more and more state and federal funds are needed and are available to those districts which prepare and submit appropriate plans and proposals. Proposal writing is inefficient and discouraging when done by one not technically skilled and experienced in such writing.

4. The District central staff should develop suggested procedures and guidelines for a management (of education) by objectives budget system --- designed to pinpoint priorities in education and to assure that available funds are customarily expended for the highest priorities of the community as interpreted by the Board.

   Comment: This is essential when one recognizes that the community can have whatever it wants if it is willing to pay for it, that the community will not pay for everything that may be suggested, that new or expanded programs may well cost money, and that the establishment of priorities is the only defensible course, with some alternatives being eliminated or postponed. Management by objectives and the general concepts of PPBS (Program Planning and Budgeting Systems) are in the limelight state and nationwide, and merit close study. Adaptations should be designed and implemented by educators.

5. District central staff should determine which of the recommendations herein can be implemented without added costs (to the District or otherwise), and which require additional funds and how much.

   Comment: The summary which follows in part IV of this Report suggests some priorities; however, only the District can effectively identify costs and determine priorities.

6. The District central staff should review the recommendations in this Report and make its own recommendations for acceptance, rejection, revision and action to the District Board.

   Comment: Official decisions of the District Board in this regard should be disseminated and appropriate action directed by the Superintendent.

IV Summary

District #48 has many excellent staff, diverse and outstanding business and industrial resources, and a favored geographical location.

In addition to some outstanding educational programs which are apparent in the District there is a major deficiency in the areas of career education --- including both those careers which do and those which do not require a baccalaureate degree.

Many staff and community persons reveal a misunderstanding or lack of comprehension of what exemplary career education really is today. As one example, some District staff appear to rate some existing career education programs as excellent ---- but others with broader orientation recognize gross inadequacies in the same programs. As another example --- one community person said "All of us came up through career education and we want something better for our children." The fact is, few if any adults today could have "come up" through exemplary career education as it is conceived and exists today, because tremendous improvements in concepts and procedures have been created in the past five to eight years.

Many school staff consider content of existing career education courses to be relevant, practical and consistent with the needs of business, industry and professions --- but lay representatives of the community see it otherwise. Obviously, some of the dichotomy is due to a lack of communication, and the truth is somewhere in-between.

There are some scattered examples of excellent cooperation and communication between the schools and the community, but vast improvement is needed in this area. For example, the District has only scratched the surface of the reservoir of resources in people, knowledge, facilities and equipment which exist and are available in the community outside of the conventional school buildings and staff.

People are concerned (and of course rightfully so) about high taxes. Yet the avenues of eliminating obsolete or less than high-priority programs have not been adequately utilized. Periodically, there needs to be reallocation of available funds, as well as some increases in total funds due to expanding enrollment and inflation.

To make a better total education program, some existing philosophies need to be reexamined and revised. Communication between school staff and community must be enhanced --- and this can only be done through large and small group interaction. School staff and community people must work this out together --- neither can do it effectively without extensive involvement of the other.

The challenges inherent in bringing about the improvement of the total program of education via more appropriate emphasis upon that which is today known as career education should be met with concurrent efforts on a District-wide and individual school basis. Leadership should be exerted by the District central staff to formulate broad general guidelines which will serve as an umbrella for respective individual school efforts in identifying and implementing changes for improvement in career education.

Involving school and community people in implementing those recommendations (such as included in Section III of this Report) which are chosen for top priority should be the first order of business.

The situation merits (even demands) prompt and decisive action.

APPENDIX C

BEAVERTON SCHOOL DISTRICT 48

Beaverton, Oregon

January 19, 1966

To: Thomas E. Woods, Superintendent

From: Committee for Study of Programs for Non-College Bound Students

Subject: Final Report and Recommendations

INTRODUCTION:

The final report of the Committee for Study of Programs for Non-College Bound Students is presented below. This represents the results of a year's study and discussion by members of the committee. We have learned that almost one-half of the district's students do not enter college after high school graduation. Although the district's school program is judged to be excellent for college preparation, it can, and should be strengthened in ways which will provide for a better educational experience for those many non-college bound students. Any change which may be necessary should not be at the expense of diminishing the quality of the college preparatory program for the academically talented, college-bound student.

The report is divided into three major sections on the basis of the three purposes originally assigned to the committee.

PURPOSE I. DETERMINE THE TYPE OF PROGRAM, STAFF AND FACILITIES NEEDED FOR THE EDUCATION OF THE NON-COLLEGE BOUND.

Identification of the Non-College Bound Student

The committee has attempted to define or describe the students who are non-college bound in order to become aware of the characteristics which apply to this group. These charactheristics, one or more of which may apply to each student classified as non-college bound, are as follows:

1. The student who plans to go directly to work following graduation. This includes two types of students:

   a. Those whose goals are immediate employment.
   b. Those whose needs are not being met by education.

2. The student who plans to attend a technical school or junior college.

3. The student who lacks maturity and/or readiness to make decisions regarding his future.

4. The financially handicapped student who, although academically qualified, does not go to college.

5. The educationally deficient student with deficiencies in basic skills--reading, math, writing and speech.

6. The student who lacks motivation.

7. The "culturally deprived" student.

8. The dropout and extremely slow learner.

9. The mentally retarded.

Recognition of these, and perhaps other, characteristics is considered important before any attempt can be made to the modification or development of a program directed toward non-college bound students. Questions have been raised and discussed about how early in the school program students can be categorized reliably with respect to their college or non-college future and whether such identification is of value in designing and applying the educational program.

Program, Staff, and Facilities for the Non-College Bound Student:

A primary goal of an educational system should be to encourage maximum development of each individual in keeping with his abilities, desires. and willingness to accept that which the school has to offer. The school should not only be responsible for providing each student with opportunities to develop along the lines of his ability and interest, but it must also seek to develop his inclination to make choices in harmony with his ability and interest. Although a satisfactory educational program should be of benefit to all students, an appropriate preparation of those students who will be going directly into the business community, rather than to college, must be recognized. The committee believes that the following points are important in considering a suitable program, staff and facilities for the educational program of non-college bound students:

A. The program should emphasize:

1. That many needs of college and non-college bound students are not greatly different in type but can be different in timing and degree.

2. That parents and the whole community will be involved, including the business community as well as teachers and the whole school.

3. That teachers' attitudes toward education of non-college bound students are extremely influential.

4. That counseling of students regarding their future entrance into the business community is as important as counseling toward college entrance.

B. The program goals for all students should include:

1. Minimum course requirements for entrance into a college or university.

2. Academic knowledge suited to entrance into a vocation: effective ability to read, spell, do basic arithmetic, and communicate orally and in written form.

3. An understanding of the functions and mechanics of government--how it has evolved and the role of the individual citizen.

4. A competent understanding of the business community--how it has evolved; how it operates; and its demands upon the individual.

5. Ability to apply knowledge to the solution of new problems. This should include ability to adapt to a constantly changing world.

6. An understanding of how tools are used in the world of work and some basic skills in the use of tools.

7. A knowledge of our cultural heritage.

8. Knowledge of good health practices.

9. Knowledge of family living.

10. Interests and skills that will contribute to recreational activities.

11. Motivation toward work in school and later employment.

12. Realistic self-concept and recognition of the value of the individual.

13. An awareness of the practical importance of attitudes, such as:

a. Personal integrity.
b. Satisfactory habits concerning attendance, punctuality, alertness, appearance, neatness.
c. Creativeness, job completion.
d. Cooperation, compatibility, adaptability.

Along with the accumulation of skills and academic knowledge, it is apparent that formation of attitudes is extremely important. The attitudes and character traits listed above are not the prime responsibility of the school, but the school does share the responsibility along with the home and the community.

Most of these goals are desirable in all boys and girls, but to the committee, it seemed particularly important that these goals not be neglected in the program of the non-college bound student since these students may not have further opportunities to develop them in a formalized situation.

C. The program should provide a curriculum to meet the needs of all boys and girls:

1. The curriculum should be flexible enough to be directed toward the preparation of a student for a "non-college" post high school experience, as well as it prepared the student who is college bound.

2. The curriculum should include the presentation of the relationship of academic preparation to the trades and skills of the work-world. This should include not just an understanding of the jobs available, but should also emphasize the academic skills necessary for jobs not requiring a college education.

3. The curriculum should provide opportunities for students to discover, explore, and develop talents and interests resulting in a better choice of a vocation and avocations.

4. A close and more intimate relationship between the business world and the school program should be established and continually developed as an integral part of the educational process.

D. Implications for staff must be recognized:

1. The administration, teaching and counseling staff, must become aware of and provide an equitable attention to those students in the school system who are "non-academic" oriented. This awareness should begin in the elementary grades.

2. The administration and staff should be constantly seeking a better understanding of the requirements and opportunities of the work-world and seek to relate them to the present curriculum.

   a. Opportunities should be provided teachers and counselors for studying the academic needs of the work-world and to develop a better appreciation of the value and significance of the work-world.

b. There should be as much emphasis made for the preparation of students for non-college future as is now made for college entrance.

3. A counseling service which provides opportunity for a teacher-parent-student relationship should be made available. This is especially important with non-college bound students in view of the attitudes of the community and parents toward "non-college." "non-professional" work.

4. Teachers who have some first-hand work experience in the areas they are teaching should be included in the teaching staff.

5. A changing world and a changing curriculum demand a continuous upgrading and retraining of the teaching and administrative staff.

E. Implications for school buildings and equipment must be recognized:

1. Adequate and appropriate building space and equipment should be provided for exploratory and pre-vocational experiences in applied arts, fine arts and business education.

2. All building should be planned by professional persons who are competent to judge the special requirements in physical facilities for teaching the prescribed courses.

PURPOSE II: STUDY AND EVALUATE PRESENT PROGRAMS TO DETERMINE IF THEY ARE ADEQUATE.

This study and evaluation of the present school program is based upon information and attitudes gained from discussions with administrators and teachers. The committee does not feel it is able to make a comprehensive evaluation of the existing program. Such an evaluation is beyond the scope of this committee, requiring professional consultants and more time.

The committee believes the educational program of School District 48 is directed primarily toward college entrance. A prevalent attitude appears to exist in our community that the only worthwhile goals for a student include a college education. It has been estimated that more than 90 per cent of the students entering our high schools, and their parents, state that the student plans to attend college following graduation from high school. Yet, local studies of the high school graduates from Beaverton and Sunset High Schools, in fact, indicate that between 40 per cent and 50 per cent of these students do not enter a four year college. Furthermore, it has been estimated that a significant proportion of those who start college do not complete a college program.

The committee is concerned that too little emphasis is placed on the importance of life work not requiring college preparation. Recognition of the importance of educational preparation for all types of life work should be reflected in the program of District 48.

The committee believes that a redirection of emphasis will be necessary in order to maintain our district's excellent educational program. We have not attempted to list or discuss the many strong areas of the existing program. Many of the criticisms which we have made about the Beaverton schools are shared in common with many other school district in the country. In evaluating the current program in the schools of Beaverton District 48, the committee believes that:

1. Some members of the school staff recognize that there are special needs of the non-college bound group which are not yet met by the school program and are seeking solutions to these problems. Even more concern and effort are needed in this area.

2. A sympathetic understanding of the problems of the non-college bound student and skills in dealing with these problems need greater emphasis in teacher training and selection.

3. Present emphasis seems to be mainly on college-oriented academic achievement as the only important goal. Not enough emphasis is placed on the type of academic courses needed by the non-college bound students.

4. The program of the individual student needs greater flexibility, which is presently limited because:

   a. There are too many required courses.
   b. Offerings in required courses are limited in type.
   c. Offerings in elective courses are limited.

5. There is too much emphasis on learning a specific body of factual information and too little emphasis on skills of applying knowledge and thought processes.

6. There is too little opportunity for a student to explore his interests and to recognize his capabilities. This is particularly true at the intermediate and high school levels.

7. Physical facilities provided for the intermediate and high school programs are not adequate for a program that will provide for the needs of all kinds of students. Specifically: the applied arts areas in the intermediate and high schools do not provide adequate or suitable areas for exploratory and pre-vocational training courses that should be offered.

8. Community resources, particularly the business and work communities, are not utilized fully in providing learning experiences for students. The community should provide more:

   a. Resource persons.
   b. Field trips for observation.
   c. Work-experience programs.

PURPOSE III: OFFER RECOMMENDATIONS AND SUGGESTIONS TO THE SUPERINTENDENT AND THE SCHOOL BOARD ON WHAT NEEDS TO BE DONE.

As has been stated elsewhere in this report, the committee is of the opinion that the educational program in District 48 is very good, especially for college preparation. This report is intended only to suggest ways in which our total program might be improved further through providing an equally good program for the students who will not be entering college. The needs of the individual student should be emphasized in any program which may evolve.

The educational needs of our large non-college group will require further professional study and continual re-evaluation in the future. We believe from our studies that the existing program should be liberalized with respect to required courses and expanded in the areas of pre-vocational and vocational courses.

Specific recommendations are listed below. In addition to these, a number of changes are implied by statments under the first and second parts of this report. These first two parts should, therefore, be considered as a part of our overall recommendations and suggestions:

1. Redefine high school graduation requirements to provide greater flexibility in the individual student's program, through elective courses of his own choosing. The minimum course requirements prescribed by the Oregon State Department of Education are recommended for District 48. A student completing these requirements would be eligible to enter a college or university. With these minimum requirements, the role of the school counselors, guidance of each student in the selection of elective courses best suited to his academic talents and interests, would have greater emphasis.

2. Expand course offerings that have vocational implications. The main emphasis in these course should be of a pre-vocational nature, rather than job training specifically. However, the courses should provide enough depth in training so that the student will be able to establish long term goals in the vocation and so that the student will have some basic skills required in the vocation. Some students could be sufficiently prepared for job entry upon graduation from high school.

3. Extend the opportunities for work-experience outside the school for students whose educational needs can best be served through this experience.

4. Increase exploratory experiences for students in the intermediate and high schools. This will require an evaluation of current offerings, scheduling practices, and physical facilities.

5. A comprehensive program in each high school is recommended in preference to one or more specialized vocational high schools. In order to provide the necessary depth of study in certain vocational areas, some degree of specialization may be necessary in each high school. If this approach is adopted, introductory courses would be offered in each high school and students who required more depth in training in special areas would be transported to the high school equipped to provide this training.

6. The adult education program should be expanded to include high school credit courses in order to provide the opportunity for adults, or youth in the community who have not completed high school training, to earn a high school diploma. The vocational training facilities provided in the high schools should be made available to the adult education program in order that the community may get maximum use of these facilities.

7. Extend the counseling program for all children in grades 1 through 12 to provide more meaningful individual counseling, both by classroom teachers and specialized counselors. Specialists should be available at the elementary level to provide consultant services and training for teachers as well as to administer special tests to children and provide counsel to child and parent as special needs occur. A specialized vocational education counselor is recommended for each high school.

8. Plan a study of community resources for enhancing the educational experiences of students. This might be accomplished by establishing a committee composed of representatives from business and the teaching staff.

9. Plan curriculum studies and revision in all areas, grades 1 through 12, with the following objectives:

   a. Provide an early introduction of, and continuing emphasis on the vocational implications of academic studies, and the academic training required in specific vocations.

   b. Enhance the status of courses which are provided for purposes other than college preparation.

   c. Continued improvement in the basic academic skills, listening, speaking, reading, writing and mathematics.

   d. Continued emphasis on the student's ability to apply knowledge to the solution of new problems.

10. Effective changes in program come about through changes in teachers' attitudes, skills, methods of instruction, and ability to relate with children and parents. Increased efforts should be made for continued improvement in the quality of the teaching staff, particularly in dealing with the student who is not college bound through:

    a. Greater care in selecting teachers who have empathy for the student whose academic talents or interests are not suited to a college education.

    b. A more effective program for induction of teachers into new teaching assignments in Beaverton District. Provide some emphasis on the needs of the non-college bound student.

    c. In-service training of teachers. This training should include:

        (1) Help for teachers in relating their subject matter to the non-academic world so that a more vocationally oriented curriculum will result.

        (2) Help for teachers in gaining a better understanding of human relations so that they can reach and influence students more effectively.

        (3) Help for the teacher to gain a deeper understanding of his subject area and greater skills in presentation to students.

11. The comprehensive program advocated in this report will require considerable capital outlay and some increase in the teaching staff of School District 48. Further study by professionally competent persons will be required for determining the specific nature of building alterations and additions, equipment needed and staff changes required. The committee recommends that:

    a. The School Board employ a professionally competent person or persons to conduct the required studies, to provide recommendations and cost estimates on the proposed changes, and to work with the professional staff and Board in establishing priorities on the various parts of the program.

    b. The professional staff be directed to study all sections of this report and to make recommendations regarding implementation of the proposed changes in program.

    c. Recommendations 1, 8, 9, and 10 be implemented for the 1966-67 school year.

12. In order for the changes in program, advocated in this report, to be implemented, a wide distribution and study of this report will be necessary. Members of the committee are willing to assist in any way that they can in disseminating information to:

    a. The business community.
    b. Local School Committees and parent organizations.
    c. The professional staff in each school in the district.

APPENDIX

ACTIVITIES OF THE COMMITTEE:

The Committee for Study of Programs for Non-College Bound Students received its assignment from the School Board in January, 1965.

A. Extensive reading has been done by members of the committee.

B. Discussions have been held with many consultants:

1. Mrs. Pearl Young and Mr. E.L. Keezel, Pupil Personnel Directors at Sunset and Beaverton High Schools, outlined the present high school program for the non-college bound and made some recommendations.

2. Mr. George Russell, Curriculum Director, District 48, discussed the history of the curriculum development program in the high schools and pointed up some problems. Mr. Russell has met with the committee many times and has been helpful as a consultant regarding curriculum problems.

3. Mr. Albert Ott, Portland Office, State Department of Employment, and Mr. Alvin Elkins, Washington County State Department of Employment, discussed employment opportunities and qualifications needed by youngsters entering the labor market.

4. Dr. Oscar Christensen, Assistant Professor of Education, University of Oregon, presented a report compiled from research studies at the University, concerned with guidance and programming for non-college bound students.

5. Mr. Carl Salser, Pacific Business College, Mr. Roy Robey, Oregon State Apprenticeship Council, Mr. Ralph Stearns, Pacific Northwest Bell Telephone Company, and Commander Leo Manke, United States Navy Recruiting Office, discussed with the committee the problems from the point of view of the business community and the armed services.

6. Members of the staff at the elementary school, intermediate school, and high school levels, discussed current programs with the committee in the light of information included in Parts I and II of this report.

High School Personnel were:

George Erickson, Principal, Beaverton High School
William Logan, Principal, Sunset High School
Harold Thomas, Curriculum Vice Principal, Beaverton High School
John Wood, Curriculum Vice Principal, Sunset High School

Intermediate School Personnel were:

Jack Nelson, Principal, Whitford School
Richard Hermens, Principal, Meadow Park School
Eugene Springer, Principal, Highland Park School
James Beach, Principal, Cedar Park School
Harold Lapp, Counselor, Meadow Park School
Richard Olson, Counselor, Whitford School
Rod Woita, Counselor, Highland Park School

Elementary School Personnel were:

Esther Peer, Principal, C. E. Mason School
Glenn Dawson, Principal, Cedar Mill School
Leonard Gustafson, Principal, West Tualatin View School
Hal Lohbeck, Principal, McKay School
Philip McGriff, Principal, Fir Grove School

C. Several members of the committee participated in visits to other school programs:

1. Mr. James King, Superintendent at Lebanon Public Schools and Mr. Dan Dunham, Vocational Education Director at Lebanon High School, explained the Lebanon Vocational Education Program and conducted a tour of Lebanon High School for the visiting members of the committee, Rev. Walter McGettigan, Mrs. Pearl Young, Mr. Hal Lohbeck and Mr. Harvey Harris.

2. Mr. Marvin Rasmussen, Principal at Benson Polytechnic High School in Portland, discussed the program with three members of the committee, Dr. Richard Jones, Mr. Ray Lokting, and Mr. Harvey Harris, and conducted a tour of Benson High School facilities.

3. Mrs. Pearl Young visited Girls' Polytechnic High School in Portland and discussed programs with members of the staff there.

D. A survey of student opinions and ideas about the existing high school program and changes that should occur, has been conducted by Mr. Howard Stroud. Mr. Stroud spent several afternoons in Sunset High School interviewing students.

The Committee has met as a group twenty-two (22) times. Average attendance at committee meetings has been nine or ten members of the fifteen members appointed. Some members have been unable to maintain regular attendance throughout the study because of conflicting obligations.

Community Representatives:

Dr. Richard T. Jones, Chairman
Mrs. Maurine Menze
Mrs. Dorothy Geisler
Rev. Walter McGettigan
Mr. Howard Stroud
Mr. Melvin Balsiger
Mr. Ray Lokting
Mr. Robert Hamreus
Mr. Earl Monnes
Mr. Robert Meyer

Professional Staff Representatives:

Mr. Harvey E. Harris, Asst. Supt.
Mrs. Pearl Young
Mr. Carroll Drew
Mr. Harold Lohbeck
Mr. Philip McGriff

APPENDIX D

TABLE I

POPULATION BY AGE GROUP*

Age Grouping	City of Beaverton	Washington County	Estimate District #48 Population
Under 5 years	1,914	14,254	7,178
5 and 6 years	727	6,153	2,895
7 to 9 years	1,130	10,322	4,684
10 to 13 years	1,429	13,739	6,079
14 years	332	3,430	1,470
15 years	329	3,334	1,440
16 and 17 years	635	6,533	2,806
18 and 19 years	522	4,772	2,167
20 years	329	2,083	1,143
21 years	314	2,115	1,121
22 to 24 years	1,252	7,465	4,253
25 to 34 years	3,463	22,970	12,322
35 to 44 years	2,161	18,796	8,699
45 to 54 years	1,861	17,296	7,779
55 to 59 years	637	6,955	2,902
60 and 61 years	214	2,418	995
62 to 64 years	272	3,055	1,224
65 to 74 years	570	7,503	2,902
75 years and over	486	4,727	2,168
TOTAL	18,577	157,920	74,227

* Beaverton Schools, 1972 Growth, Building & Sites Study, Exhibit 6.

TABLE II

DISTRICT 48 ENROLLMENT
CURRENT AND PROJECTED*

	Current	Projected					
	1971	1972	1973	1974	1975	1976	1977
1	1,492	1,530	1,560	1,591	1,639	1,688	1,739
2	1,450	1,522	1,560	1,591	1,623	1,688	1,739
3	1,616	1,479	1,552	1,591	1,623	1,655	1,739
4	1,654	1,648	1,509	1,583	1,623	1,655	1,688
5	1,743	1,704	1,681	1,539	1,615	1,655	1,688
6	1,634	1,795	1,755	1,715	1,570	1,647	1,688
Elementary	9,589	9,678	9,617	9,610	9,693	9,988	10,281
7	1,667	1,683	1,849	1,808	1,749	1,601	1,680
8	1,691	1,717	1,733	1,904	1,862	1,784	1,633
9	1,699	1,742	1,769	1,785	1,961	1,918	1,820
Intermediate	5,057	5,142	5,351	5,497	5,572	5,303	5,133
10	1,572	1,750	1,794	1,822	1,839	2,020	1,975
11	1,485	1,619	1,803	1,848	1,877	1,894	2,081
12	1,354	1,484	1,618	1,801	1,846	1,875	1,892
High School	4,411	4,853	5,215	5,471	5,562	5,789	5,948
Special Education	138	142	146	150	155	160	165
TOTAL	19,195	19,815	20,329	20,728	20,982	21,240	21,527

* Beaverton Schools, 1972 Growth, Building & Sites Study, Chart 4.

TABLE III

FOLLOW-UP INFORMATION - FALL, 1964
Sunset High School
Class of 1963

Total in Graduating Class - 333	Number			Percent		
	Boys	Girls	Total	Boys	Girls	Total
Letters sent or calls made	165	168	333	100	100	100
Responses	152	156	310	92	94	93
Attending 4-year college (1963-64)	94	87	181	61.8	55.8	58.3
Attending junior college or vocational school	19	23	42	12.5	14.7	13.5
Attending business schools	2	8	10	1.3	5.1	3.2
Attending beauty schools	0	2	2	0.0	1.3	0.6
Total students receiving further education	115	120	235	75.7	76.9	75.8
Armed Forces	13	0	13	8.6	0.0	4.2
Unemployed	3	2	5	2.1	1.3	1.6
Employed	21	29	50	13.8	18.6	16.1
Housewife		7	7		4.5	2.6
No response	13	10	23	8.0	6.0	7.0

TABLE IV

FOLLOW-UP INFORMATION - FALL, 1967
Sunset High School
Class of 1963

	Number			Percent		
	Male	Female	Total	Male	Female	Total
Questionnaires	165	168	333	100	100	100
Responses	91	96	187	55.1	57.1	56.2
Education						
Attended 4-year college	75	68	143	82.4	70.8	76.5
Graduated in 4 years	27	21	48	29.7	21.9	25.7
Post-graduate work	10	3	13	11.0	3.1	7.0
Completed 3 years	47	39	86	51.6	40.6	46.0
Attended junior college	13	7	20	14.3	7.3	10.7
Attended business college	0	12	12	0.0	12.5	6.4
Attended vocational school	3	2	5	3.3	2.1	2.7
Attended other	5	3	8	5.5	3.1	4.3
Employment						
Full-time	41	58	99	45.1	60.4	53.0
Part-time	12	12	24	13.2	12.5	12.7
Military Service						
Now serving	20	0	20	22.0	0.0	10.6
Completed	9	0	9	10.0	0.0	4.8
Marital Status						
Single	55	45	100	60.4	46.9	53.5
Married	34	49	83	37.4	51.0	44.4
Divorced	1	2	3	1.1	2.1	1.6
Deceased	1	0	1	1.1	0.0	0.5
No response	74	72	146	44.8	42.9	43.8

TABLE V

APPROVED REIMBURSED PROGRAMS

1971-72 Enrollment

	Enrollment
ALOHA HIGH	
*Food Services	39
Distributive Education	29
Office Occupations	12
BEAVERTON HIGH	
*Health Careers	66
Child Services	58
Distributive Education	55
General Clerical (Office Occupations) (Office Simulation)	24
Construction	7
Mechanics	20
SUNSET HIGH	
Distributive Education	75
General Clerical (Office Occupations) (Office Simulation)	20
Construction	6
Mechanics	14
	425

*Students from all three high schools are enrolled.

TABLE VI

WAGE & SALARY EMPLOYMENT BY INDUSTRY *
UNITED STATES

	Employment (Millions) 1968	1980	Percent Change
All Industries	80.8	99.6	23
State & Local Government	9.1	13.8	52
Services, Personal, Professional and Business	19.1	21.1	40
Construction	4.0	5.5	35
Finance, Insurance and Real Estate	3.7	4.6	24
Trade	16.6	20.5	23
Manufacturing	20.1	22.4	11
Transportation, Communication and Public Utilities	4.5	4.9	10
Federal Government	2.7	3.0	10
Mining	0.6	0.6	-9

* United States Department of Labor, U.S. Manpower in the 1970's.

TABLE VII

WAGE AND SALARY EMPLOYMENT BY INDUSTRY *
OREGON

	(Thousands) 1967	1975	Percent Change
All Industries	651.1	806.2	23
State & Local Government	106.5	135.6	18
Services, Personal, Professional and Business	96.9	129.9	33
Construction	30.3	40.2	33
Finance, Insurance and Real Estate	31.5	43.6	38
Trade	147.0	183.2	25
Manufacturing	164.2	188.8	15
Transportation, Communication and Public Utilities	47.8	53.5	12
Federal Government	25.2	29.2	16
Mining	1.7	2.2	29

* State of Oregon Employment Division, The 1967 Manpower Resource of the State of Oregon and Its Metropolitan Areas.

TABLE VIII

WAGE AND SALARY EMPLOYMENT BY INDUSTRY*
PORTLAND METROPOLITAN AREA

	Employment (Thousands)			Percent Change
	1964	1968	1972	1964-1972
All Industries	288.0	354.8	397.5	38
State and Local Government	34.2	43.4	50.9	49
Services, Personal, Professional and Business	45.1	58.7	68.3	50
Construction	13.8	17.1	18.0	30
Finance, Insurance and Real Estate	17.0	22.3	24.7	45
Trade	71.8	85.7	96.1	34
Manufacturing	66.6	84.5	93.9	25
Transportation, Communication and Public Utilities	26.8	29.4	30.9	15
Federal Government	12.7	13.7	14.7	16
Mining	(No figures given)			

*State of Oregon Employment Division, The Manpower Resource of the Portland Metropolitan Area.